OLD!

THE ESSENTIAL GUIDE TO CLASSIC GAMES

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BEHIND THE NEED FOR SPEED

HANNO LEMKE ON CREATING EA'S THRILLING 3DO ONE-ON-ONE RACER

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GAMING'S UNSUNG HERO

FROM GRAFTGOLD TO HR GIGER: THE INCREDIBLE STORY OF JANE WHITTAKER

A GAME OF TWO HALVES

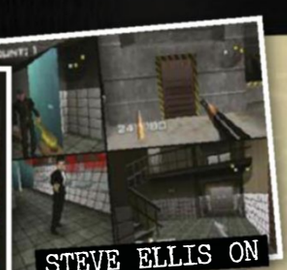
HOW THE COLLYER BROTHERS TOOK CHAMPIONSHIP MANAGER AND THEIR FOLLOW-UP TO THE TOP OF THE TABLE

GOLDENEYE

RARE'S NINE BEST BOND AGENTS DELIVER THE TOP-SECRET INTEL BEHIND THE N64'S LEGENDARY SHOOTER

KARL HILTON ON DOING BOND JUSTICE

DAVID DOAK ON LEVEL DESIGN



STEVE ELLIS ON MULTIPLAYER

PLUS

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LOADING...

One of the challenges of Retro Gamer is finding new inventive ways of covering classic games. Incidentally, it's a great task to face as it pushes you to present things in a way you might not have considered before; hopefully delivering the definitive verdict on the game in question in the process.

So this month we're presenting the definitive feature on the N64's greatest shooter – Rare's *GoldenEye*. Regular readers might recall that we went behind the scenes some 11 years ago to interview a handful of team members. This month, we've gone all out in order to bring you the last word on this classic game. We've not only interviewed every single person involved with the game but we're looking at every aspect of its creation, from its production to licensing, it's a huge feature for a hugely important game.

At the time, *GoldenEye* felt like you were actually taking part in Bond's world, and it seemed like a huge leap for film licences. It also had an incredible multiplayer mode, which was so good it finally convinced my non-gaming wife that those 'silly games' I played could actually be a lot of fun. Annoyingly, she always played as Oddjob, though.

Enjoy the magazine!

THE RETROBATES

WHAT'S YOUR FAVOURITE GOLDENEYE MOMENT?

DARRAN JONES

Playing the Facility mission genuinely felt like I was playing the actual movie. The level of detail was astonishing at the time.

Expertise:
Juggling a gorgeous wife, two beautiful girls and an award-winning magazine

Currently playing:
Resident Evil: The Umbrella Chronicles

Favourite game of all time:
Strider

DREW SLEEP

Me and my mate Josh stumbled across a 'gaming bus' which had *GoldenEye* inside. We spent hours there until we realised there was a small army of people waiting to have a go.

Expertise:
Recreating the **RG** team on *XCOM* (Sam died three times)

Currently playing:
Monster Hunter: World

Favourite game of all time:
Final Fantasy VIII

NICK THORPE

Slappers Only, Licence To Kill, four players. Sneaking up on my unsuspecting friends to deliver the DeathSlap™ was enormously satisfying.

Expertise:
Owning five Master Systems (I sold two)

Currently playing:
Super Mario Odyssey

Favourite game of all time:
Sonic The Hedgehog

SAM RIBBITS

This is tough because there are so many moments in *GoldenEye*. And tougher still because I haven't experienced any of them...

Expertise:
Rudimentary ASCII art

Currently playing:
The Binding of Isaac: Afterbirth+

Favourite game of all time:
Croc: Legend Of The Gobbos

PAUL DRURY

In 2003, I played a deathmatch with David Doak at Nottingham's Screenplay festival. I plucked up courage to interview him afterwards and that's where my retro writing began.

Expertise:
Remote mines

Currently playing:
GoldenEye

Favourite game of all time:
Sheep In Space

GRAEME MASON

Playing over and over again the level set on board the frigate, which has brilliant music and tight, compelling gameplay.

Expertise:
Adjusting the tape azimuth with a screwdriver

Currently playing:
Resident Evil 7: Biohazard

Favourite game of all time:
Resident Evil 4

MARTYN CARROLL

At Play Expo last year, watching the game's Karl Hilton and Graeme Norgate getting stuffed by a couple of punters in *GoldenEye* deathmatch.

Expertise:
Sinclair stuff

Currently playing:
Super Mario Odyssey

Favourite game of all time:
Jet Set Willy

DAVID CROOKES

That moment when I realised that I could use stealth tactics to get through the levels. A real game-changer!

Expertise:
All things Amstrad CPC, Dizzy, Atari Lynx and PlayStation (but is it retro? Debate!)

Currently playing:
Total Eclipse

Favourite game of all time:
Broken Sword

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>> Load 178 Breathing new life into classic games

Ultimate Guide: Enduro Racer

Your essential guide to Yu Suzuki's thrilling dirt bike-based arcade hit

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All nine members of the hit N64 game deliver the definitive verdict on the groundbreaking shooter

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Disconnect
Options
Log
View Log
"Unused".
By what name shall I call you (Q to quit)?
drahcir
Creating new persona.
What sex do you wish to be?
m
The command for help is HELP. Try TOUR for a tour.
Elizabethan tearoom.
This cozy, Tudor period room is where all MUD adventures start. Its exposed oak beams and soft, velvet-covered furniture provide it with the ideal atmosphere in which to relax before venturing out into that strange, timeless realm. A sense of decency and decorum prevails, and a feeling of kinship with those who, like you, seek their destiny in The Land. When you are suitably composed, you may enter that domain by stepping through an opening to the north; however, you are welcome to stay here for as long as you like, sipping tea and watching the world
Players:
Still in the Elizabethan
go places...
sip tea
You watch the world go by.
[Persona saved on +1 x 1].
Health
Magic
sip tea

MUD: The Original Dungeon Delver

Richard Bartle explains how his ancient adventure game helped spawn the popular MMOs of today

RETRO RADAR

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Developers and friends celebrate the fantastic work of the legendary Ocean Software artist

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GAMING HEADSET OFFER
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James Bond theme by Monty Norman.
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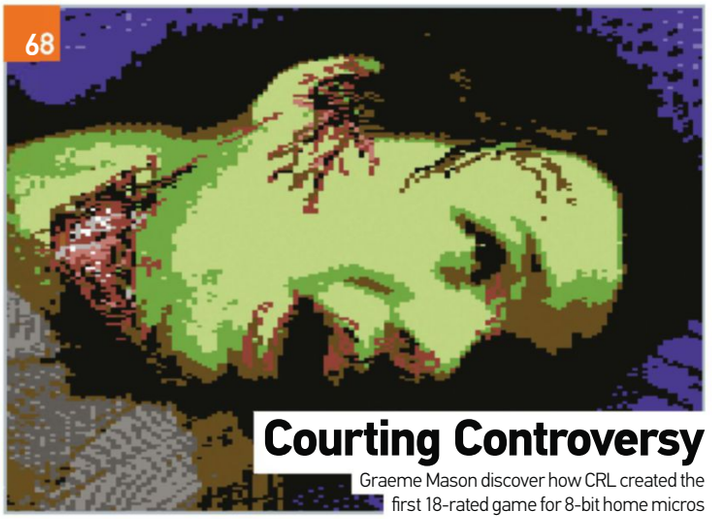
The Making Of: The Need For Speed

Discover how Electronic Arts created its hit one-on-one racer for the 3DO



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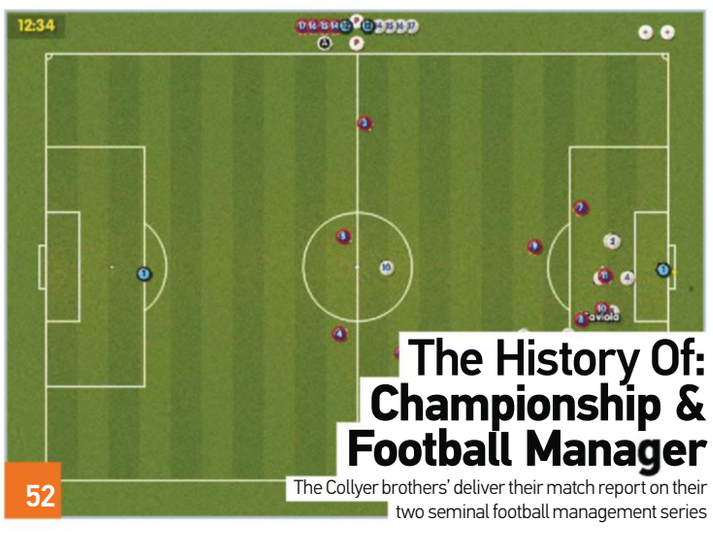

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Nick's Master System-powered time machine has landed him in February 2001

BOB WAKELIN: A LASTING LEGACY

Friends pay tribute to legendary Ocean Software artist, Bob Wakelin

Retro Gamer is sad to report that the acclaimed Ocean Software artist, Bob Wakelin, has passed away.

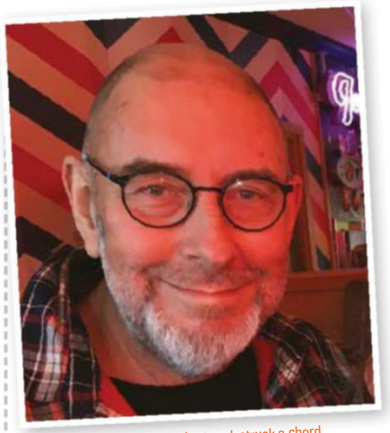
Robert 'Bob' Wakelin discovered his love of drawing from an early age and was eventually able to make a career out of it. Suffering from asthma as a child, Bob would typically spend a lot of his time at home ill and would spend that time drawing, whilst reading various comics and books. As his health improved, his love of drawing remained and it became his craft.

After studying art for three years, Bob got his first job designing posters (along with the odd album sleeve) for a company called Modular. He also had a short career with post-punk/new wave band, Modern Eon, performing vocals, percussion and strings, as well as creating album sleeves for the band and other artists. Heavily inspired by the work of DC and Marvel comics, he would not only emulate their art in his later work, but would even start creating covers, most notably for *Spider-Man* and *Return Of The Jedi* and *The Super Heroes Monthly*. For many gamers, however, Bob Wakelin is best known for the stunning covers he created for nearly 100 Ocean Software games.

Bob began his 11-year-old relationship with Ocean Software in 1983 when it was still known as Spectrum games. Early art like *Gilligan's Gold, Comic Bakery* and *Chinese Juggler* ensured that Ocean's games stood apart from their peers and we'd imagine a lot of those earlier releases were purchased on the strength of Bob's art alone. Bob had a way of injecting action into his work that made them look exciting to play. Sometimes the game was a turkey, but at least you had that art to enjoy.

"When you think of Ocean titles, the first thing that springs to mind is the box art," reveals ex-Ocean developer, Paul Hughes. "The illustration on the front of the box or the A4 adverts in the magazines painted a picture in your mind's eye of what the game was going to be. Certainly, in Ocean's formative years, those cover illustrations could be significantly better than the product within. All of this was down to one man with a unique talent – Bob Wakelin. For me, Bob's artwork defined Ocean's product output; the quality of the artwork imbued a professionalism upon any title that it adorned. His work stood out on the crowded shelves, like a great piece of album artwork."

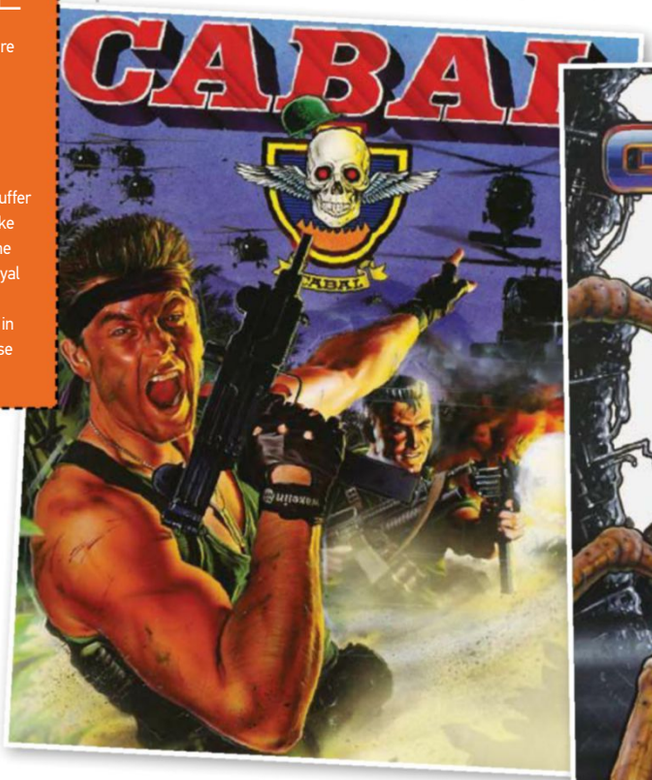
Mark Jones, who worked as a graphic artist at Ocean is in full agreement.

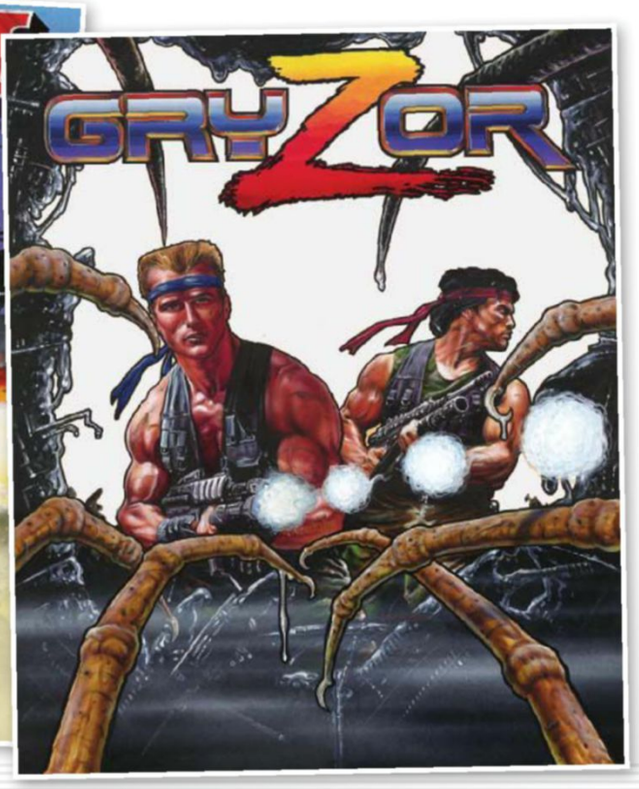


» Bob's fantastically detailed artwork struck a chord with many gamers.

HOW TO HELP A GOOD CAUSE

Aplastic anaemia is a relatively rare disease that Bob suffered from for the last three years of his life. The Aplastic Anaemia Trust is a small charity that is dedicated to researching this disease and making it easier for people who suffer from it. Bob's family would also like to mention the fantastic support he received from the NHS staff at Royal Liverpool University Hospital. If you would like to donate to AAT in Bob Wakelin's memory then please head to **theaat.org.uk**.





» [Left] Covers, such as *Cabal*, instantly highlighted the energy and action that Bob could imbue his illustrations with.

» [Far left] Bob has admitted that he'd often look to photography for inspiration. The characters on *Gryzor's* cover are basically two images of Arnold Schwarzenegger.

"Whenever a new Bob Wakelin illustration turned up at Ocean it was big news," he recalls. "We all knew we had the best-looking artwork in the country bar none. *Athena*, *Renegade*, *Rastan*, *Gryzor*, *Vindicator*, *Operation Wolf* – all caused ripples in the programming department at Ocean when their illustrations turned up for the first time."

Another artist who was impressed by Bob's talents was Bill Harbison, who worked on numerous Ocean games, including *Chase HQ* and *Robocop*. "Bob was to computer box art what Drew Struzan was to movie posters," he begins. "Every image he created was a masterclass in technique and the epitome of quality. Not only were they iconic, but they bridged the gap between the archaic nature of the in-game graphics and how the game felt in your imagination. As a teenager, I would sketch some of his game covers and try to improve my own art. This was way before I even thought about trying to get into the industry myself. I finally met Bob about six years ago at a retro gaming convention. He didn't know that I was nervous about meeting him, but he came across as very approachable and quite happy to chat about his work and his technique. He was also happy to give advice on some of my own work and was honest and encouraging with his comments."

> **"His work stood out on the crowded shelves, like a great piece of album artwork"**
>
> Paul Hughes

Some of Bob's most impressive art was for Jim Bagley's *Midnight Resistance*, *Cabal* and *Firefly*, who is also keen Bob's praises. "Bob was an amazing talented artist," he says. "Although I knew he was battling an illness for over three years it still came as a shock when he died, and it hit me hard, it was like losing a brother. I really enjoyed Bob's company he was always a laugh and he loved the adoration from the retro community at the events he went to. Although Bob did all the poster and box art for all the Ocean games, I never actually met him until 2009 at Byte Back, where I also met David East and Anna Bäckström, from there, grew a great friendship in the four of us, and he will be deeply missed by all who knew him. Bob is a true Legend!"

Bob Wakelin's artwork undeniably shaped gaming history and reach of Ocean during the Eighties means even the most unaware will have experienced his talent. We'll leave the last words to friend David East, who was a regular companion to Bob at the retro events Bob would visit. "I'm very saddened by Bob's untimely passing," he says. "I've lost someone whose talent I admire greatly, a business partner (of sorts), but moreover a true friend. Bob had a cast-iron persona, but through the passage of time I came to realise that there was a lot more to him than met the eye. He was humble, often self-deprecating but more than anything, a kind, selfless, caring soul who put others first. His family were his world. Bob had a wicked sense of humour and told tales of his past 'misdemeanours' with great joy and no regrets. He wasn't perfect and never professed to be. We mourn his passing, but must be thankful of the incredible body of work he left to share with us. We both had the same political and social views. Bob made no secret of the fact that he wasn't really a religious man, but preferred science. I remember a conversation I had with him one day. He asked me: 'What do you think happens when we die?' I replied: 'We probably just slip back out of *The Matrix*'. His response: 'Oh, I do like the sound of that.' Goodbye Bob, see you on the other side."

Our thoughts go out to Bob's family and friends.

READERS PAY TRIBUTE

The man was a master of his trade, even if you are much aware that he was fairly deprecating about a number of his efforts! But that went with the person that he was, a humble and grounded individual who was a pleasure to talk to and be around. He will be sorely missed.
Mayhem

It's been a very sad piece of news for me. I love Bob's work, his artwork has been the main reason that made me start my Hit Squad collection, and his *Parallax* poster is, and always will be, beside my retro computer corner, so I can look at it while the C64 loads a game or the Amiga does its magic.
Hiro

Very sad, I have a signed *Batman* in my son's room. I bought so many games based on just on his artwork.
Rocky1980

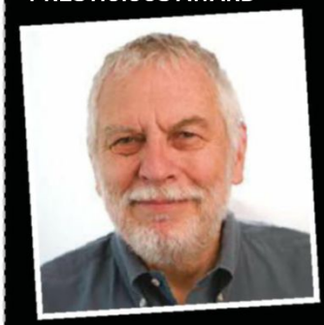
At a time when computer graphics often couldn't, Bob's artwork helped fire our imaginations. His artistry will be a legacy of Eighties gaming.
paranoid marvin

Extraordinary artist, every piece of artwork inspiring, I don't think the man did a bad cover.
ncf1

His artwork lifted the titles and gave them an edge few competitors could have for. They are plain lovely.
NorthWay

NO AWARD FOR NOLAN

THE COFOUNDER OF ATARI LOSES OUT ON PRESTIGIOUS AWARD



Nolan Bushnell has recently come under fire after being offered an award by the Games Developer Conference. He was due to receive the Pioneer Award to recognise his 40-year involvement in the industry, but the announcement caused controversy after game devs and members of the #MeToo movement drew attention to the various documentations of sexist culture that had existed at Atari under Nolan's leadership.

After research into the claims, the GDC delivered the following statement: "The Game Developers Choice Awards Advisory Committee, who vote on the Special Award winners for each show, have made the decision not to give out a Pioneer Award for this year's event, following additional feedback from the community. They believe their picks should reflect the values of today's game industry and will dedicate this year's award to honor the pioneering and unheard voices of the past."

Nolan soon released his own statement, praising the decision: "If that means an award is the price I have to pay personally so the whole industry may be more aware and sensitive to these issues, I applaud that. If my personal actions or the actions of anyone who ever worked with me offended or caused pain to anyone at our companies, then I apologize without reservation."

THE C64 MINI IS READY TO LAUNCH

RETRO GAMES LTD PREPARES ITS NEW GAMES MACHINE

The NES and SNES Mini have been incredibly popular for Nintendo, so it's no surprise to learn that other companies have attempted to create their own miniature marvels. While devices already exist for systems like the Mega Drive, Spectrum and Atari 2600, a brand-new offering from Retro Games Ltd is just about to launch and it's looking very swanky indeed.

The C64 Mini will be published via Koch Media (Deep Silver) on 29 March and looks set to revitalise the Commodore 64 in the same way that the SNES Mini did for Super Nintendo owners. It comes preloaded with 64 titles that represent some of the biggest games of the era, including *Boulder Dash*, *California Games*, *Paradroid*, *Uridium*, *Monty On The Run*, *Impossible Mission* and *Winter Games*.

All the games are officially licensed and represent some of the biggest developers for the machine, including Epyx, Hewson, First Star Software, Gremlin Graphics and The Bitmap Brothers. Many of the included games were huge hits on their original release and there's a great mix of genres available, ensuring there's something for everyone, no matter what your taste in games is.

While the actual keyboard on the device is for display only, it's possible to plug a USB keyboard into the C64 Mini, allowing you to add your own Basic listings. It's also possible to use save states, add CRT filter options for a more authentic experience and even use US and European display modes, as well as a pixel-perfect display. Games can be played on an authentic-looking joystick and the system has added function keys for game specific modes.

The C64 recently reached sixth place in our Greatest Games Systems poll, so this is the perfect chance for you to become acquainted with or revisit one of the greatest home computers of all time. Needless to say you can expect a review of the C64 Mini in the very next issue of the magazine.

» There are 64 preloaded games on the system, including gems as *Boulder Dash* and *Everyone's A Wally*.

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– *Hooked Gamers*

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Streets Of Rage 3 Official Soundtrack

While the soundtracks for the first two *Streets Of Rage* games are universally beloved, the third in the series is rather more divisive. Yuzo Koshiro and Motohiro Kawashima opted for a brave approach, composing much of the game's music around automatically generated loops of sound. The result is that rather than the dance club sound that was found in the first two games, the soundtrack to *Streets Of Rage 3* has a faster, more abrasive techno feel.

There are some real classics here. *Fuze* is as good an opening stage track as you could hope for, getting the blood pumping. *Dub Slash* creates an uneasy atmosphere by conjuring bizarre tones from the YM2612 sound chip, and *Crazy Train* always seems half a second from going bonkers. If you haven't heard this soundtrack or initially dismissed it, we'd recommend giving it a look.

Price: £24.99 **From:** data-discs.com

PICK OF THE MONTH

Almost Hero

Master Chow Khan and his apprentices make their living from selling festively decorated bonsai trees. Unfortunately, seeds aren't easy to come by these days, necessitating a beat-'em-up expedition to get more. It's a simplistic but attractive game for the NES, and the only one we can think of where you can defeat enemies by throwing a Furby at them.

Price: $49.99
From: megacatstudios.com

Retro Game Dev: C64 Edition

Derek Morris has spent decades in the games industry as a coder on games including the *Colin McRae Rally* series and *Silent Hill: Book Of Memories*. By following his new book, you'll put together a shoot-'em-up and a platform game for Commodore's incredibly popular 8-bit machine, learning valuable 6502 assembly skills for your own projects along the way.

Price: £11.59
From: amazon.co.uk

Space Channel 5 T-shirt

Do you fancy yourself an ace space reporter, travelling across the galaxy to report on alien invasions and rescue dance-crazed human captives? If so, that's a bizarre fantasy you have – but it's a shared one, as *Space Channel 5* follows the startlingly similar exploits of Ulala via some rhythm action gameplay. Show your love for the game with this officially licensed tee.

Price: £22 **From:** insertcoinclothing.com

Deluxe Arcade Controller Kit For Raspberry Pi

If you want a truly authentic feeling when playing arcade games via Raspberry Pi, you might want to take a look at this kit. It's very easy to put together, offers easy access to all the Raspberry Pi's ports, and uses genuine Sanwa arcade parts. Configuration was very simple too, and we were up and running in no time.

Price: £99.99
From: monsterjoysticks.com

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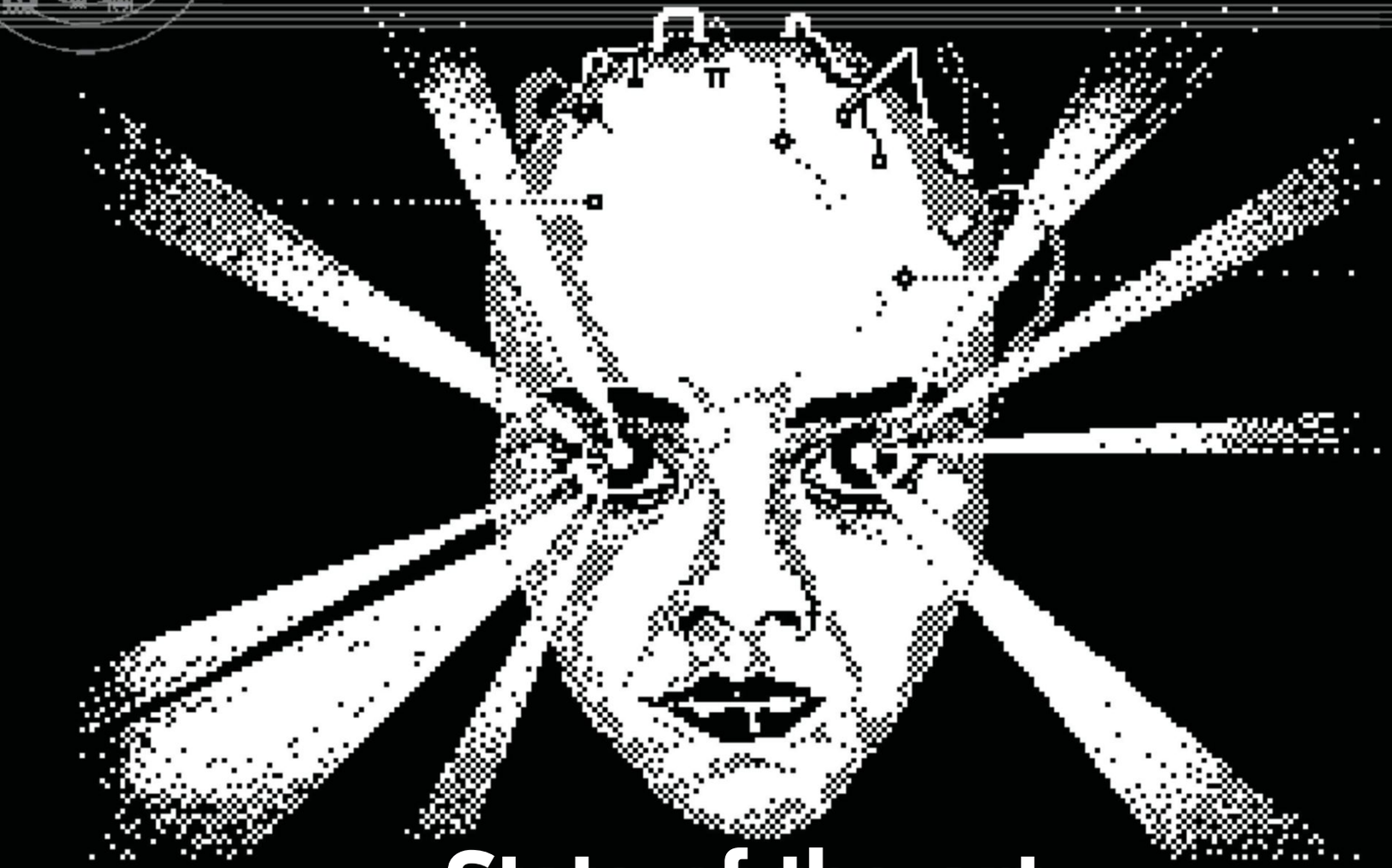
Here's my bio... Paul Rose
Paul Rose is probably better known as Mr Biffo – the creator and chief writer of legendary teletext games magazine *Digitiser.* These days, he mostly writes for kids TV, but can still be found rambling on about games, old and new, for his daily website, Digitiser2000.com.



State of the art

There's an argument that gamers of a certain age sometimes engage in: whether or not videogames can be considered art.

It's weird that nobody really worried about this in the Eighties and Nineties. It was a debate which rose up once games started getting a little bit more mature and ambitious in their storytelling, and when graphics became more realistic.

Back when I was growing up, it would never have crossed my mind to discuss with a friend whether *Chuckie Egg* or *Ah Diddums* could be considered a work of art. I'd argue that the corner began to be turned with *Deus Ex Machina*, Mel Croucher's ambitious multimedia ZX Spectrum title.

There were interactive whatnots before that, which arguably blurred the line between art and game, but *Deus Ex Machina* was the first to get mainstream coverage in the games mags of the time. Frankly, when I was 13 years old, I thought it was a load of old guff. I sort of liked the music, but I didn't know what the hell was going on. Now that I'm (slightly) older I can appreciate what Mel Croucher was going for.

For me, it's a little more complicated than whether games are art or not. I mean, surely it isn't as binary as that? Games – interactive entertainment – are as broad a canvas as cinema, or TV, or literature. Personally I'd have thought it was obvious that games can be both works of art and mindless shooters.

Not so. In his review of the *Doom* movie, legendary US critic Roger Ebert damned games thusly: "To my knowledge, no one in or out of the field has ever been able to cite a game worthy of comparison with the great dramatists, poets, filmmakers, novelists and composers. That a game can aspire to artistic importance as a visual experience, I accept. But for most gamers, videogames represent a loss of those precious hours we have available to make ourselves more cultured, civilized and empathetic."

Unfortunately, all that suggests to me is that Roger Ebert had never played a videogame in his life, and needed to better experience what he was criticising. *Doom* is just one corner of an industry that has come to encompass work as moving as *Life Is Strange* and *Journey.* Roger failed to see that potential.

So, of course, videogames can be considered art – something that you wouldn't necessarily say about, you know, a Fisher-Price Chatterbox Telephone. But at the same time, I don't really care. What I get from games isn't an appreciation of beauty, or empathy, or to feel more cultured and civilised. It's more profound for me than that; they speak to that child inside of me. They give me permission to use my imagination to pretend and to play, and to forget about adult life for an hour and just be a kid again.

Never once when I was a child did I stop to ask if games were art. They were just games. And that was enough. ✱

Do you agree with Paul's thoughts? Contact us at:

RetroGamerUK @RetroGamer_Mag darran.jones@futurenet.com

8-bit cinematic delights

Jerry Ellis, The creator of The 8-Bit Book – 1981 to 199x, tells us about his shiny new tome

While they're not so popular today, film and TV licenses used to be a huge deal during the Eighties and Nineties. Jerry Ellis tells us about his brand-new book, *The Book Of The Game Of The Film*, and why it's a must read for any movie buff.

Why focus on movie and television licences?

It's not just gaming that I'm passionate about: it's entertainment and storytelling in general. I wanted to give myself an opportunity to write about more than just games this time, and to create something that would appeal to a broader audience.

What eras will the book be focusing on?

The initial plan was to cover every single noteworthy film tie-in of the entire 8-bit computer-gaming era, officially licensed or otherwise. This amounted to around 125 titles, the earliest being *Duel* for the Commodore PET, with *Alien 3* for the Commodore 64 the most recent. Later, when I decided to expand the book to cover television programme tie-ins and games inspired by popular brands and literary texts, I adopted the same approach, limiting myself only to games released for 8-bit home micros.

It's been a long time since the release of your last book, why the wait?

The 8-Bit Book came out in 2009, and my son was born the same year, so being a father became the top priority from that point. I was also working full-time as an English teacher back then, and it was only around three years ago, when I switched to part-time teaching, that I found myself with enough spare hours each week to seriously contemplate tackling another book. Even then, it still wasn't easy to find as much time to write as I needed. So, in 2016 I gave up teaching altogether in order to get the book written once and for all – and also to try my hand at acting, but that's another story!

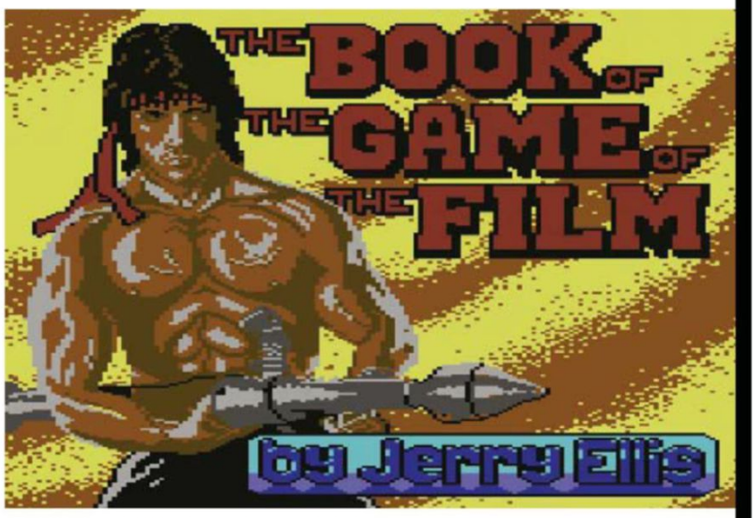
Why not use crowdfunding to fund your book?

I needed to have complete control over this project. That included having the absolute certainty that it would come to fruition when it was ready, no matter what. I didn't want any niggling concerns about whether or not it would get enough backing and funding from a Kickstarter campaign.

Will The Book Of The Game Of The Film feature any developer interviews?

No. The closest I came to involving anyone else was to approach one or two 'big names' to contribute a foreword (David Braben wrote the foreword for my first book) but the people I contacted didn't feel they'd be able to add anything that hadn't already been covered many times elsewhere, so I dropped the idea. I'm pleased about that, though. It's very satisfying knowing the book is all my own work.

» *Aliens* is Jerry's favourite film licence that's been turned into a videogame. He prefers the Electronic Dreams version.



» The initial print run is 1,000 copies, so make sure you don't miss out.

> **"My Cineworld Unlimited card is probably the single most important object I own"**
> Jerry Ellis

What is it you personally like about movie licences?

Well, I do feel a bit sorry for them – they've definitely been treated unfairly by reviewers suspicious that they exist purely to fleece punters. Also, I'm as much a film fanatic as I am a dedicated gamer. Ever since I was a boy, my cousins and I have been quoting lines from our favourite films at each other (that's basically how we communicate). My Cineworld Unlimited card is probably the single most important object I own.

What's the perfect film licence in your eyes?

Aliens (the British version developed by Electric Dreams) is a great example. The atmosphere, graphics and overall concept all combined to show just how successfully a film could be reimagined in 8-bit form.

» TV shows like *Neighbours* are also covered in Jerry's new book and feature all sorts of interesting anecdotes.

And what's the worst?

Cobra. Even though I have a soft spot for it, I'm not oblivious to the fact that it's a stinker of unparalleled whiffiness.

If this is a success are there any plans for a sequel?

I do have another 8-bit book planned – content, title, even the front cover image are all in place – but it'll be at least a year before I can throw myself into it fully.

You can order *The Book Of The Game Of The Film* for £24.99 by visiting bit.ly/golembooks

JEWEL IN THE CROWN

ARCADE GAMES

"Back in 2006 my partner and I purchased an entire cargo container of arcade games containing 34 games in excellent condition for $3,000. That roughly breaks down to $88 per game and they make up the bulk of my current collection."

LAND BEFORE TIME PROMOTIONAL WHIRLY

"Very rare Don Bluth *Land Before Time* promotional whirly from 1988. Bought from a garage sale for just one dollar!"

WIRED FOR SOUND POSTER

"I have had the *Wired For Sound* Syd Brak poster since 1982. I have all six in the series. I bought them when I was a teen for just a couple of dollars and kept them all these years."

DONKEY KONG CEREAL ANIMATION CELLS

"*Donkey Kong* animation cells from 1983. Three cells in this frame. Paid $25, now valued at $350."

Arcade Angel

Readers take us through the retro keyhole

BIO

NAME:
Catherine DeSpira

ESTIMATED VALUE:
Doesn't matter to me

FAVOURITE SYSTEM:
SNES

FAVOURITE GAME:
Ghosts N' Goblins (Arcade)

People who collect videogames aren't exactly unusual these days, this magazine very much pays testament to that. But finding people who have the space, time and dedication to collect and restore old arcade machines is a very different matter altogether. One such person is Portland native Cat DeSpira, who was lucky enough to be growing up when the whole scene exploded in North America.

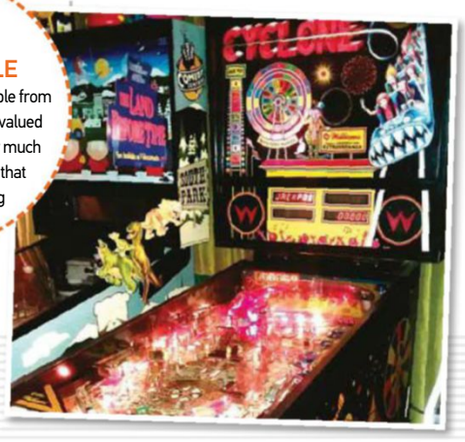
Her memories of this time are very vivid. "I remember the electromechanical games of the early Seventies, but it was games like *Boot Hill* and *Night Driver* that got me hooked. My family also got a *Pong* home system for Christmas 1975 and I became enamoured with that thing so much that my parents took it away because it affected my study time! Shortly after that period, *Space Invaders* came and my parents, no matter how much they tried, couldn't stop me from falling in love with that game. So, my earliest memories of videogames occurred just before the craze exploded in the USA but my best memories came right after it!"

Despite videogames being such a huge part of her early childhood and continuing right into her teens, Cat didn't actually start collecting until 12 years ago. "Back in 2006 my guy brought home a *Mortal Kombat* cab that he bought off Craigslist in order to save it from being MAME'd," she says. "The seller had painted it with black lacquer. We stripped that paint off, working until our fingertips were raw. Beneath was perfectly preserved side art. I was smitten with the idea of collecting arcade games as art pieces and it all went from there!" So does this love of collecting extend to home systems? "Absolutely!" says Cat. "Around this time I also fell in love with PlayStation. I have loved it since the first model and still think that Sony giving my generation the Walkman helped shape us into the mobile generation of today. I'm also a SNES fan. After the arcade craze died the SNES became my first choice because the graphics and game styles were so good. Although I did spend a lot of time playing comp games in the Nineties, like *Doom*, *Hexen* and *Quake*, the SNES became a staple I felt I could always fall back on and never be disappointed by."

Despite all of this it's pretty safe to say that arcade games are Cat's biggest love as she still continues her quest to save and restore cabs. "What began as a whim with one game grew over time into a very large collection of around 80 or so arcade games and pinball tables," she says. There is still one coin-op that eludes Cat however. "It has to be Atari's *Liberator*! I don't have one. I know only person who does, and he went through a lot to get it. The side art on that game is one of the coolest sci-fi images ever rendered."

WILLIAMS CYCLONE PINBALL TABLE

"Williams' *Cyclone* pinball table from 1988. Absolutely mint and valued at $4500, I don't recall how much I paid for it, but it wasn't that much. It's been a long time!"



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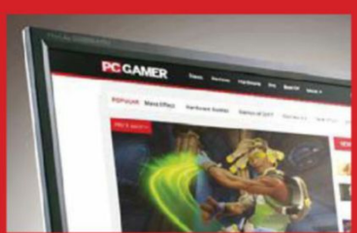

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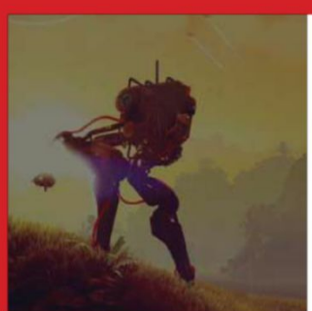

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BACK TO THE NOUGHTIES

FEBRUARY 2001 – Sega is in dire straits, JRPGs are the flavour of the month and a Mega Drive game hits the news because of the internet. Confused? Hop in Nick Thorpe's TARDIS-trashing time machine to find out more...

[Dreamcast] Could Acclaim really have hailed a *Crazy Taxi* to the PlayStation 2?

NEWS FEBRUARY 2001

In a bizarre piece of news, the Mega Drive version of *Zero Wing* hit headlines. The game's mistranslation "All Your Base Are Belong To Us" had been making waves online for a while, thanks to a photo manipulation thread on the Something Awful forums and the song *Invasion Of The Gabber Robots* – a *Zero Wing* remix by The Laziest Men On Mars. Bad_CRC, a user on the Tribal War forums, created a Flash video which combined the song with a slideshow of the altered images. This went viral and drew attention from the likes of *Wired* and *Time*.

On 18 February, Robert Hanssen was arrested in Vienna, Virginia for selling secrets to the Soviet Union and subsequently Russia. Over 22 years, the FBI agent had pocketed $1.4 million by providing documents, plans and the identities of Russian double agents. He avoided the death penalty by pleading guilty to 15 charges of espionage, and is currently serving 15 life terms with no parole.

On 28 February, ten people died and 82 were injured in a rail crash at Great Heck near Selby, North Yorkshire. A Land Rover had veered off the M62 and onto the railway after the driver, Gary Hart, fell asleep at the wheel. A passenger train struck the vehicle and derailed before a set of points deflected it towards an freight train with which it collided. Hart received a sentence of five years imprisonment.

THE LATEST NEWS FROM FEBRUARY 2001

The hot topic on everyone's lips this month was the state of Sega and its Dreamcast, with rumours swirling that the company was ready to pull the plug on its home console hardware. "Is the DC on life support?" asked Andrew Dixon in *CVG*'s Mailbag. "It would be a surprising capitulation by Sega," remarked Michael Lowry-Philips in a letter to *Video Gamer*. "Personally 2000 was... well... maybe the less said the better," said Sega's Toshihiro Nagoshi, in his column for *Edge*. The *Official PlayStation 2 Magazine* even claimed that Acclaim had already signed a deal to bring Sega games to Sony's console, starting with *Crazy Taxi*. But no magazine was prepared to go on the record and say that the Dreamcast was finished – except one.

Video Gamer claimed to have spoken to an anonymous source within Sega, who claimed that, "Sega has decided to concentrate on what they do best – produce and develop great games." The claims were officially denied by both Sega Europe and Sega Of America, the latter stating that, "We reconfirm our commitment to Dreamcast and the continued support of Dreamcast – not just in software, but hardware too." However, according to the leak Sega would be making an official announcement on 30 January (just as the magazine went on sale), stating that the Dreamcast production line would shut down in March but that software support would continue throughout 2001 and beyond. Sega would simultaneously announce its intention to develop for all other formats, as well as a deal with Pace to integrate Dreamcast technology into cable and satellite set-top boxes.

Initial responses from industry figures contacted by *Video Gamer* were broadly positive. Sarah Chudley of Bizarre Creations said "It's got to be positive news for gamers, as Sega's strength has always been its games," and a spokesperson from Sony in Japan said "This is a welcome move for PlayStation 2. Sega has excellent technology, and a pool of popular games software." The magazine speculated that the PS2 would soon see *NiGHTS Into Dreams*, *Ecco The Dolphin*, *Virtua Fighter 3*, *Space Channel 5* and *Jet Set Radio*, while the Game Boy Advance would receive versions of *Power Drift*, *Streets Of Rage*, *Sakura Taisen*, *Sonic* and *OutRun*.

[PC] After years of hype, *Giants: Citizen Kabuto* finally hit the shelves and turned out brilliant.

[Dreamcast] The first great Dreamcast RPG arrived just a bit too late to make a difference.

[PlayStation] In any other month, a new *Final Fantasy* would have stolen the headlines.

When the date rolled around, everything happened exactly according to the leak, effectively ending Sega's 18 years in the console hardware business. Major news outlets picked up on the story, and the numbers outlined by the BBC showed the necessity of the move. Sega had sold 2.32 million Dreamcasts from April to December, missing sales targets by 44 per cent, and was forecasting a loss of 58.3 billion Yen – a massive £340 million. Caught out by print deadlines, the rest of the gaming press would have to wait to pass comment.

The biggest game in for review this month was easily Square's hotly anticipated *Final Fantasy IX*. The latest instalment in the long-running Japanese RPG series felt like a throwback to older games in the franchise, as it favoured fantasy over the sci-fi themes that had become prevalent in the last few PlayStation entries. *CVG*'s Maura Sutton offered it the full five stars, claiming that, "There are plenty of moments here that you will still be talking about in years to come." Less successful was Sony's rival entry into the PlayStation RPG market, *Legend Of Dragoon*. It wasn't a bad game – just one that "wants so badly to be *Final Fantasy VII*" according to *Video Gamer*'s Mike Jenkins, who awarded it 7/10. CVG's Johnny Minkley awarded three stars, opining that the game required "superhuman patience" and that "the sheer dedication required at first, may put many people off."

Dreamcast fans who hadn't immediately binned their systems were also treated to a delightful Japanese RPG, *Grandia II*. *Edge* offered it 7/10, saying, "While it doesn't exactly forge its way into uncharted territory, *Grandia II* pushes all the right RPG buttons," while *CVG* gave four stars, claiming that there were, "enough well-scripted twists and turns to keep you glued to the screen". Importers looking for something that doesn't involve turn-based combat would have been interested in *Edge*'s 8/10 review of *Guilty Gear X*, a beautiful 2D fighting game. Interestingly, the reviewer claimed that "the fact that it is not *Street Fighter* is the bait that should entice most fighting disciples" – make of that what you will.

After a bright start, the Dreamcast finally buckled under the financial strain of its parent company.

PlayStation 2 owners were served with a conversion of the PC multiplayer hit *Unreal Tournament*, which received 8/10 in *Official PlayStation 2 Magazine*. This was despite reviewer Jamie Sefton's warning of serious framerate issues, where he noted, "After playing a copy of *Unreal Tournament* on a two-year-old P266 PC with a rubbishy 3D card we found it still runs smoother – not what you want to hear if you're the owner of a shiny new PS2." PC gamers also finally got the long-awaited *Giants: Citizen Kabuto*, a quirky game which blended shooting and strategy and had been doing the press rounds since the first issue of *Arcade* back in 1998. *Video Gamer* awarded it 9/10 and *Edge* 8/10, with the former calling it, "An contender for the best game of 2001."

Check back next month for more news, reviews and juicy stories from the Sega fallout.

[PS2] The deathmatch carnage of *Unreal Tournament* hit Sony's console this month.

CHARTS

FEBRUARY 2001

PLAYSTATION 2

1. SSX (EA)
2. FIFA 2001 (EA)
3. Timesplitters (Eidos)
4. Tekken Tag Tournament (SCEE)
5. Dead Or Alive 2 (SCEE)

GAME BOY

1. Pokémon Pinball (Nintendo)
2. Pokémon Trading Card Game (Nintendo)
3. Pokémon Yellow (Nintendo)
4. Donkey Kong Country (Nintendo)
5. Pokémon Blue (Nintendo)

PC

1. Who Wants To Be A Millionaire? (Eidos)
2. Championship Manager 00/01 (Eidos)
3. The Sims (EA)
4. Command & Conquer: Red Alert 2 (EA)
5. Escape From Monkey Island (Activision)

MUSIC

1. Whole Again (Atomic Kitten)
2. Teenage Dirtbag (Wheatus)
3. American Dream (Jakatta)
4. Here With Me (Dido)
5. Back Here (BBMak)

THIS MONTH IN...

Official PlayStation 2 Magazine

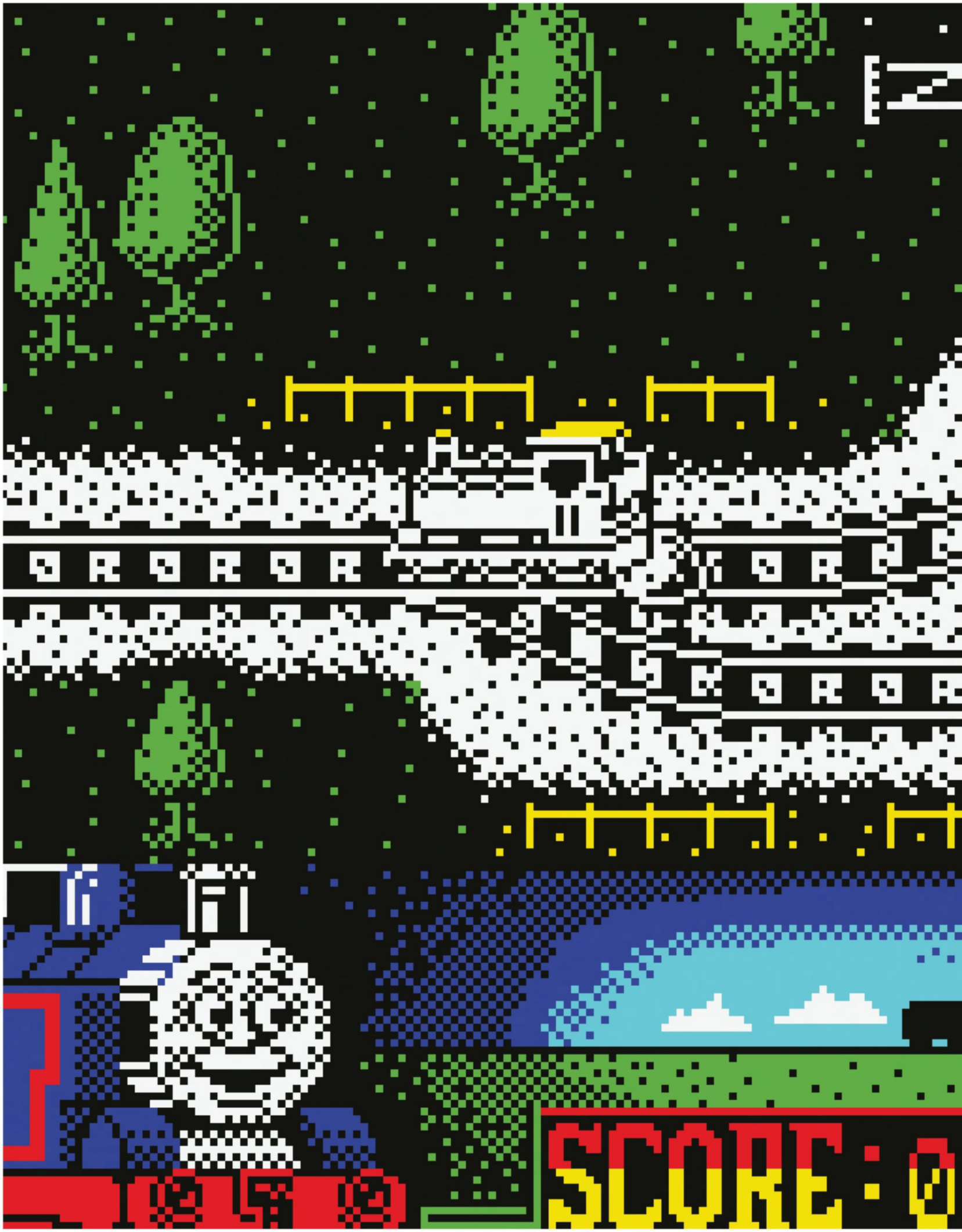
Despite a preview lowering expectations by calling *The Bouncer* "an astounding trailer for what the PS2 is capable of, rather than an end result in itself", and a game that will "cause debate among gamers", the magazine claimed Square's beat-'em-up was still "one of the most important games of 2001". Erm…

N64

Tigger's Honey Hunt and *Rugrats In Paris* were the only UK releases to review this month. It's no surprise that the magazine responded with a two-page guide on how to run import games – with the domestic release schedule already dire and not looking to improve, it was the best way to squeeze some extra life from the Nintendo console.

Video Gamer

Despite the promise of a new issue on 2 March, featuring reviews of *Phantasy Star Online* and *Banjo-Tooie*, *Video Gamer* would never be seen again as the low-cost magazine experiment drew to a close with no fanfare. It's a bit of a shame, really – while it lacked feature content, we did quite like the uncompromising review style of the magazine.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Thomas The Tank Engine

A VERY NAUGHTY ENGINE

» ZX SPECTRUM » 1991
» ENIGMA VARIATIONS

If you were to borrow my time machine from Back To The Noughties and jump back a bit further to meet me in my infant school years, there would be four guaranteed ways to get my interest. *Sonic The Hedgehog* is the obvious one, of course, and I've probably mentioned my fondness for the *Teenage Mutant Hero Turtles* (as I knew them) in the magazine before. The ones you might not know about are *Sooty* and *Thomas The Tank Engine*, the latter of which did actually factor into my gaming habits as a kid.

I didn't often dig through the local play scheme's box of Speccy tapes – most of the time, I was just content to play *Video Poker*. But one day, probably after some concerned adult had taken the gambling-themed game away, I did just that and struck gold with *Thomas The Tank Engine*. I had no idea how such a game would play, but I was excited to load it up. As a fairly faithful rendition of the theme tune played, I had high hopes for what I was about to experience.

A piece of my innocence died that day. I'd picked normal mode and was presented with a frustrating nightmare of a game. The simple goal of getting to the end of the track within the time limit was made impossible by oncoming trains, objects that would occasionally be placed on the only viable tracks, and Thomas' infuriating tendency to derail at high speeds. Still, the play scheme staff were pleased, because I put down the joystick for once and went outside.

GOLDE

22 *GoldenEye's development*

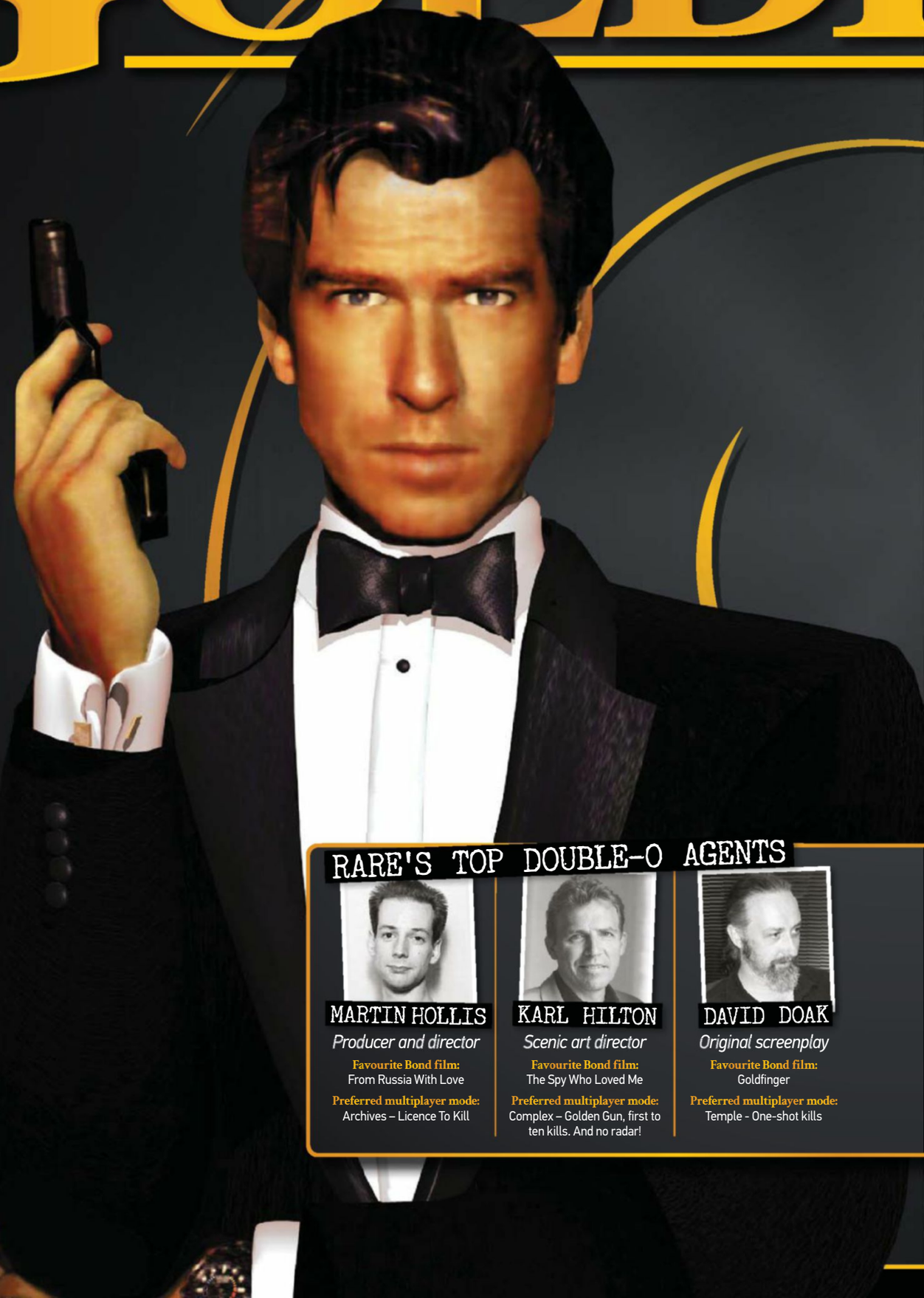
24 *Art production*

26 *Nailing the level design*

28 *Audio and visual design*

30 *Adapting the Bond licence*

32 *Making the multiplayer mode*



RARE'S TOP DOUBLE-O AGENTS

MARTIN HOLLIS

Producer and director

Favourite Bond film:
From Russia With Love

Preferred multiplayer mode:
Archives – Licence To Kill

KARL HILTON

Scenic art director

Favourite Bond film:
The Spy Who Loved Me

Preferred multiplayer mode:
Complex – Golden Gun, first to ten kills. And no radar!

DAVID DOAK

Original screenplay

Favourite Bond film:
Goldfinger

Preferred multiplayer mode:
Temple - One-shot kills

ENEYE

GOLDENEYE TURNS 21 THIS YEAR SO WE GATHERED TOGETHER THE NINE MEMBERS OF THE ORIGINAL DEVELOPMENT TEAM TO TALK ABOUT THE CREATION AND LEGACY OF THEIR SEMINAL N64 SHOOTER. PAUL DRURY SHAKES THE VODKA MARTINIS

Gamers knew the score in the Nineties. Rare made platformers, you played first-person shooters on PC and any game based on a film was going to be awful. Then came *GoldenEye 007* and changed all that.

It was released two years after the film had hit the big screen, only a few months before the next entry in the franchise, *Tomorrow Never Dies*, came out, and with no great expectations of success, even from the team that had developed it. It went on to shift a staggering 8 million copies, making it the third biggest selling title on Nintendo's 64-bit console, and invariably appears in the echelons of those perennial 'Best Ever Games' lists. It also made number ten in **Retro Gamer**'s definitive countdown in issue 150, in case you were wondering.

That success is perhaps even more remarkable when you consider that for the majority of the dev team, *GoldenEye* was their first professional title. Indeed, Tim and Chris Stamper, the heads of Rare, had to remind the team that "this wasn't their university project" as development dragged on for over three years. Yet the fact that most of the team were new to the business meant they weren't constrained with notions of what was and wasn't possible in game design. If they thought of a good idea, they tried to implement it.

This naivety yielded some groundbreaking results. The game pioneered body-specific hit reactions, disconnecting the gun from the camera, the use of a sniper rifle, environment mapping (look closely and you'll see low-res reflections of your surroundings on shiny surfaces) and even dual-wielding of weapons, all features which have become fixtures in the shooter landscape. More than that, *GoldenEye* proved that a story-driven FPS could work on consoles… and that deathmatches never really get old.

Gathering together all nine core members of the team has been inspiring. Some stayed at Rare and worked on its spiritual sequel *Perfect Dark*. Some went on to set up Free Radical, the home of the *TimeSplitters* series. Some have stayed in games, others have moved on but all can agree on two things: being part of the *GoldenEye* team was an experience they will never forget and playing as Oddjob in multiplayer is always cheating.

» [N64] Home console first-person shooters at the time were seen as tricky to pull off, but Rare managed to do it in style.

» [N64] *GoldenEye* has its fair share of explosions, and then some.

MARK EDMONDS

Director of photography

Favourite Bond film: Skyfall

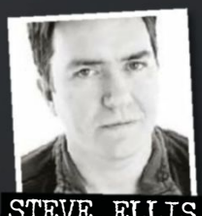
Preferred multiplayer mode: Temple – Grenade launchers and Licence To Kill

B JONES

Costume designer

Favourite Bond film: Goldfinger

Preferred multiplayer mode: Stack – First to 20 kills, remote mines

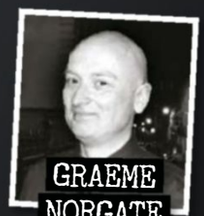


STEVE ELLIS

Second unit director

Favourite Bond film: Casino Royale

Preferred multiplayer mode: Temple – Golden Guns and Licence To Kill



GRAEME NORGATE

Original music and sound effects

Favourite Bond film: Live And Let Die

Preferred multiplayer mode: Bunker – slappers only

GRANT KIRKHOPE

Original music

Favourite Bond film: Casino Royale

Preferred multiplayer mode: Egyptian – Licence To Kill

DUNCAN BOTWOOD

Production designer

Favourite Bond film: On Her Majesty's Secret Service

Preferred multiplayer mode: Archives – Pistols only, one-shot kills

Polishing GoldenEye

Mark Edmonds on developing a first-class FPS

For Mark Edmonds, his first contribution to the development of *GoldenEye* was sat alone in a room in the Stamper mansion, filleting joints.

"I didn't really know what I was working on," explains Mark, understandably. "I was asked to investigate creating filleted joints for an animated 3D character system; basically, a smooth skin over joints, like an elbow, rather than just having a solid block for an upper and lower arm. I had no idea it was connected to *James Bond* but I must have passed the test because I got moved over to the stable block and onto the team proper. It was great just to be working on my first videogame!"

Programmer Mark joined project leader Martin Hollis and artist Karl Hilton and the trio got to work on early builds of *GoldenEye*. Initially, the game was heavily influenced by Sega's *Virtua Cop* with Bond following a predetermined route through levels. "We were using this amazing new invention called the analogue stick to aim a crosshair," grins Mark. "But then we thought, 'Wouldn't it be cool to play a game like *Doom* with actual 3D graphics? That would be a new experience!' And we knew the Nintendo 64 was capable of rendering 3D graphics from any orientation or direction."

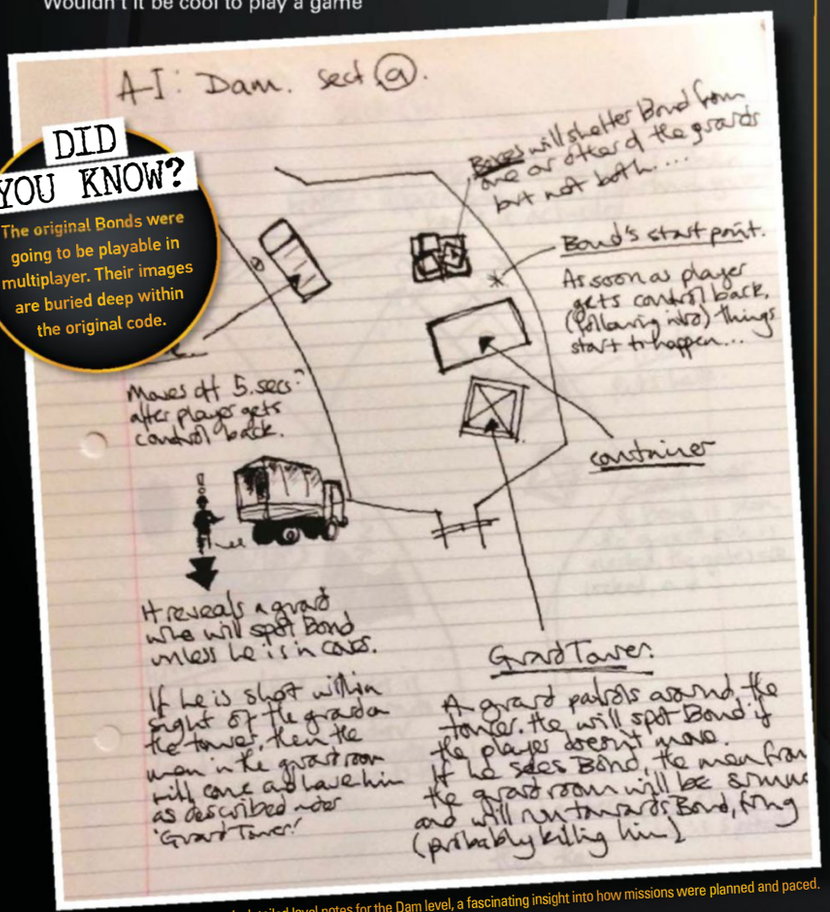
» [N64] The bars get flack for being intrusive, but having a dynamic HUD was unheard of at the time.

The team decided to take Bond 'off the rails', though knowing exactly what the N64 was capable of required a good deal of faith. Its development system used high-end Silicon Graphics machines, a pleasure to work with, if prone to overheating, whilst the specifications of Nintendo's forthcoming console were yet to be finalised. "I vaguely remember being disappointed seeing the tech demos running on the first development consoles," admits Mark. "But once our own artists got going onto the project, they managed to make the graphics look good!"

Mark beavered away on the *GoldenEye* engine, taking art created in such packages as Alias and GameGen and rendering them in game. He helped develop the system which handled the motion captured animations, pioneering in their day, and worked on the enemy AI, so your foes could at least attempt to outwit your agent before crumpling in agony when you shot them in the groin. Yet despite all these innovative features, the team really wasn't sure anyone else would be impressed.

"It was amazing to travel to the E3 show in 1997 but I don't remember much reaction to the game there," says Mark. "It probably wasn't the right environment for people to get into it. It was only afterwards when the reviews started coming that I realised people actually did like it."

» Mark dons a tuxedo at E3 in 1997.


AI: Dam. sect (a).
Bond will shatter Bond from one or other of the guards but not both...
Bond's start point.
As soon as player gets control back, (following intro) things start to happen...
Moves off 5. secs after player gets control back.
container
It reveals a guard who will spot Bond unless he is in cover.
If he is shot within sight of the guards the tower, then the man in the guard room will come and have him as described under 'Guard Tower'
Guard Tower:
A guard patrols around the tower. He will spot Bond if the player doesn't move. If he sees Bond, the man from the guard room will be summoned and will run towards Bond, firing (probably killing him)

» Duncan's detailed level notes for the Dam level, a fascinating insight into how missions were planned and paced.

DID YOU KNOW?

The original Bonds were going to be playable in multiplayer. Their images are buried deep within the original code.

LOCATION, LOCATION

Jetting around the world with Bond

ARKANGELSK DAM

■ Your first mission takes at the Byelomorye dam. It's a heavily guarded location, but weapons like the sniper rifle make things easier.

FACILITY

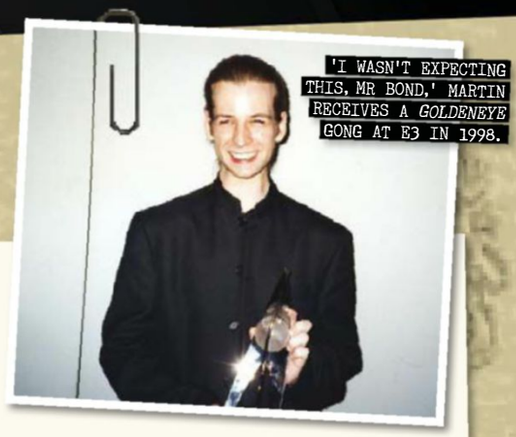
■ Starting off in the bathrooms you have to make your way through the laboratories, and eventually the bottling room.

RUNWAY

■ You need to escape in a plane, but first you need to fight through a platoon of soldiers. Good job you have access to a tank, eh?

> **"We were using this amazing new invention called the 'analogue stick'"**
>
> Mark Edmonds

RARE'S VERY OWN M



'I WASN'T EXPECTING THIS, MR BOND,' MARTIN RECEIVES A *GOLDENEYE* GONG AT E3 IN 1998.

MARTIN HOLLIS ON LEADING THE TEAM

What was your reaction to being told you were to head up a team making a *Bond* game?

Oh, I wasn't approached. I'd heard on the grapevine, from my team leader on *Killer Instinct*, Mark Betteridge, I think, that the *Bond* licence was floating around. A couple of guys from the *Donkey Kong Country* team were going down to a press party for the film *GoldenEye* and Nintendo had told its friends at Rare there was a possibility we could make a game to go with it. Later, I heard they weren't going to take on the licence, so I went straight to Tim Stamper and said I'd like to do it.

Was he delighted you had stepped up to the challenge?

He didn't look chuffed or anything. He just said, 'Well, you better make a document then, Martin.' So I did. And it was all my own work, teacher.

We've seen that 'Top Secret' document online and it's impressive how many of those ideas, from the variety of missions to the effect of bullets on the environment, made it into *GoldenEye*.

I never really looked at it after a while. Once we were 20 per cent in, we just concentrated on making the game, not what I'd written. It's astonishing how much from the document made it into the final game. That was partly luck.

It was also down to the team you put together. How did you go about recruiting people to the project?

Of course I wanted good people, enthusiastic about the *Bond* universe... though not all of them were. They were just incredibly good craftspeople. I actually made a list of everyone in the company involved with development and scored them out of ten. I wrote notes on the side, too, and I spoke to Simon Farmer in production about each one and he'd tell me, 'Oh, you don't want them...' He knew if they were suitable for the project.

You sound a bit like M from the Bond films, with a dossier on everyone.

Well, I did wear all black at the time and had a confident swagger. It's hard to know how they viewed me. I was the only one who had made a game professionally before. Rare tended to hire people not from the games industry.

Was there an advantage to this being their first game – that your team didn't know what they couldn't do?

Oh certainly. I didn't know what we couldn't do either. It was supposed to be a three person project and take nine months or something. No one told me it would take three years and about ten people because no one knew.

Given it took so long to develop, were the Stamper brothers constantly harassing you to get it finished?

It's astonishing how little bother we got from them. They had the whole company to administer plus the financial agreement meant *GoldenEye* was a low risk project for Rare. And they might have been a little bit frightened of me. Why? I was extremely self-assured. That's putting it nicely. The Stampers created the environment, they hired the people I could pick from, we never had to worry about the project being cancelled or being forced in a different direction and we had their trust. Their role was huge.

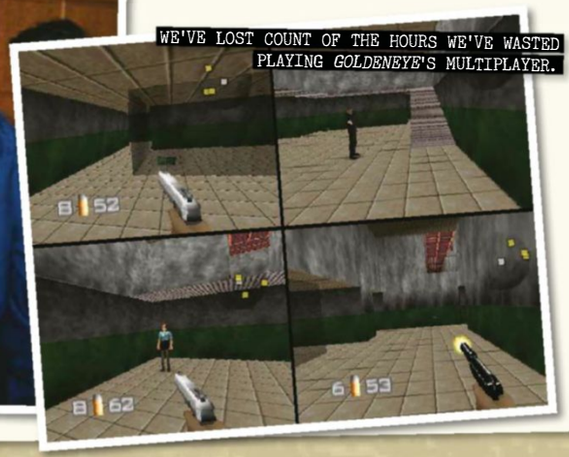
Didn't Nintendo, worried about the violence that took place in the game, ask you to put in cutscenes at the end of each level, showing everyone who had been killed getting up and shaking hands?

Yes, and I know when you read that it seems ridiculous but you have to look deeper at feedback like that. It was all about the close up killing. You could see the pain and suffering – they'd get down on their knees and then you'd shoot them again in the head. It felt personal. Unsurprisingly, this didn't sit well with Nintendo. I was trying to negotiate a line between being true to *Bond* and Nintendo's family-friendly brand. We did soften some things round the edge – I think we dialled down the redness of the blood by 20 per cent.

Were you pleased you literally stuck to your guns?

Many people at Rare, Nintendo and the world in general have been incredibly nice to me, for decades! *GoldenEye* is such a good thing to have on your CV and was such a pleasure to make.

MARTIN CHECKS HIS OUTFIT BACKSTAGE AT E3 IN 1997.



WE'VE LOST COUNT OF THE HOURS WE'VE WASTED PLAYING *GOLDENEYE*'S MULTIPLAYER.

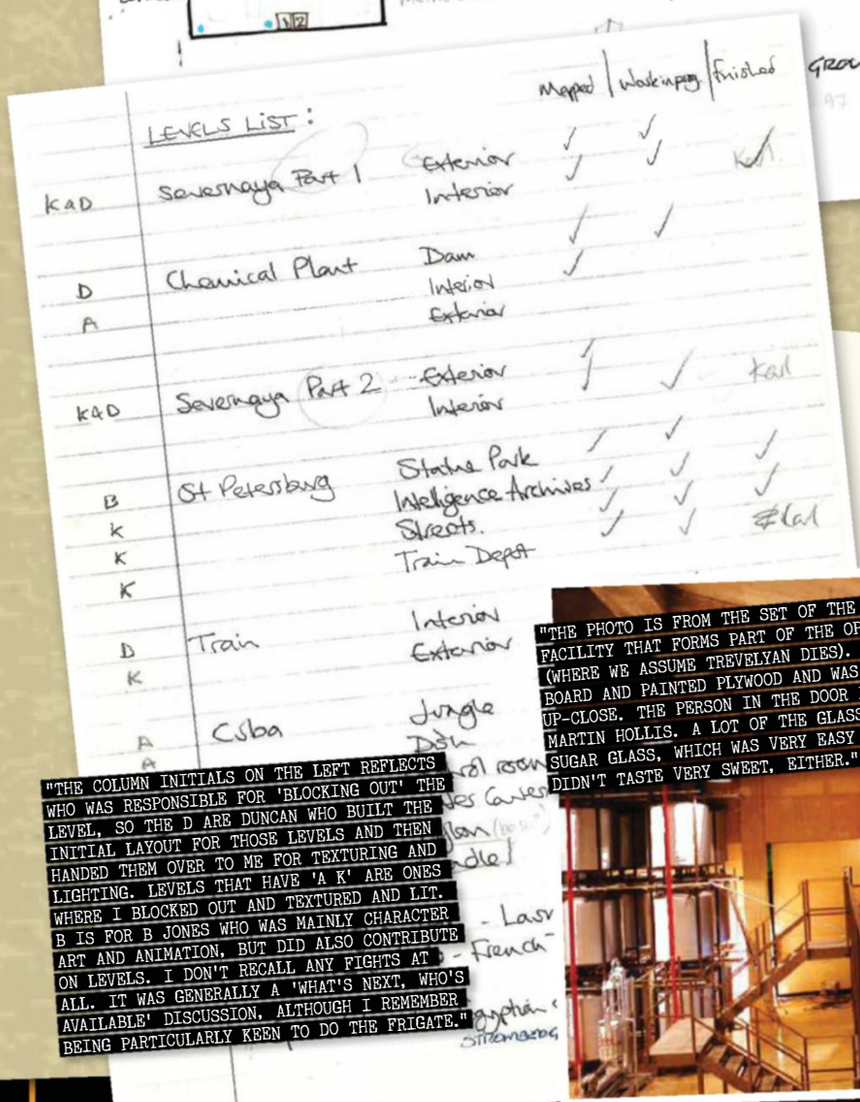
BOND BLUEPRINTS

KARL HILTON TALKS US THROUGH THE VARIOUS DESIGN ASPECTS OF KEY PARTS OF RARE'S 007 GAME

"IT'S HARD TO SAY WHEN THIS WAS DONE, AS THE PROJECT RAN FOR TWO YEARS. I THINK THE BLUE DOTS WILL BE FROM DAVID DOAK, SHOWING POTENTIAL SPAWN POINTS FOR GUARDS. THE LEVEL WILL HAVE ORIGINALLY BEEN BUILT VERY CLOSE TO THIS DESIGN, BUT THEN, AS WE ACTUALLY PLAYED THE LEVEL, I WOULD OFTEN GO IN AND MAKE CHANGES BASED ON DAVE'S REQUESTS: BLOCKING A VIEW OR OPENING UP AN ALTERNATIVE ROUTE ETC."

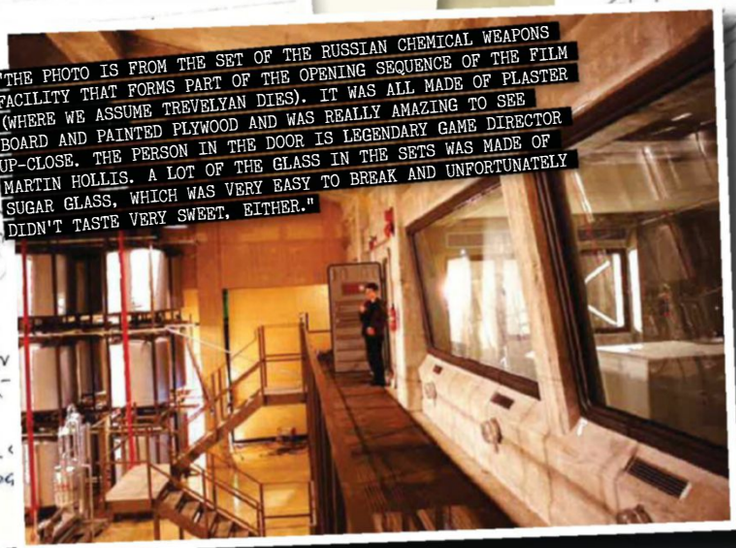
DID YOU KNOW?

GoldenEye is the third best-selling Nintendo 64 game with 8.09 million units shifted. *Mario Kart* was second with 9.87 million and *Mario 64* is first with 11.89 million.



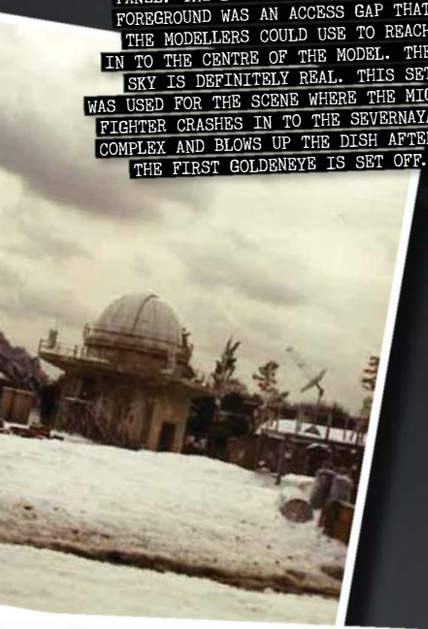
"THE COLUMN INITIALS ON THE LEFT REFLECTS WHO WAS RESPONSIBLE FOR 'BLOCKING OUT' THE LEVEL, SO THE D ARE DUNCAN WHO BUILT THE INITIAL LAYOUT FOR THOSE LEVELS AND THEN HANDED THEM OVER TO ME FOR TEXTURING AND LIGHTING. LEVELS THAT HAVE 'A K' ARE ONES WHERE I BLOCKED OUT AND TEXTURED AND LIT. B IS FOR B JONES WHO WAS MAINLY CHARACTER ART AND ANIMATION, BUT DID ALSO CONTRIBUTE ON LEVELS. I DON'T RECALL ANY FIGHTS AT ALL. IT WAS GENERALLY A 'WHAT'S NEXT, WHO'S AVAILABLE' DISCUSSION, ALTHOUGH I REMEMBER BEING PARTICULARLY KEEN TO DO THE FRIGATE."

"THIS IS THE COMPLEX DEATHMATCH LEVEL WHICH WAS THE VERY FIRST CUSTOM-DESIGNED DM LEVEL THAT WE DID. INITIALLY, WE TRIED SOME ADAPTED IN-GAME LEVELS, LIKE THE FACILITY, TO SEE HOW IT WORKED. TOWARDS THE END OF THE PROJECT, AFTER THE SINGLE -PLAYER LEVELS WERE FINISHED, I HAD SOME TIME TO DEVELOP BESPOKE MULTIPLAYER LEVELS. LOOKING AT THE LAYOUT, IT IS CLEAR I'M TRYING OUT A LOT OF DIFFERENT-SHAPED SPACES AND LINKING THEM TOGETHER. ALL LEVEL DESIGNS BEGAN WITH A BASIC FLOOR PLAN TO CONTROL THE AMOUNT THAT WOULD BE DRAWN TO TRY AND KEEP THE FRAMERATE UP."



"THE PHOTO IS FROM THE SET OF THE RUSSIAN CHEMICAL WEAPONS FACILITY THAT FORMS PART OF THE OPENING SEQUENCE OF THE FILM (WHERE WE ASSUME TREVELYAN DIES). IT WAS ALL MADE OF PLASTER BOARD AND PAINTED PLYWOOD AND WAS REALLY AMAZING TO SEE UP-CLOSE. THE PERSON IN THE DOOR IS LEGENDARY GAME DIRECTOR MARTIN HOLLIS. A LOT OF THE GLASS IN THE SETS WAS MADE OF SUGAR GLASS, WHICH WAS VERY EASY TO BREAK AND UNFORTUNATELY DIDN'T TASTE VERY SWEET, EITHER."

"THE OUTSIDE BUILDINGS ARE NOT REAL BUILDINGS. THEY WERE ABOUT AN EIGHTH SCALE MODEL DIORAMA BUILT OUT ON THE RUNWAY AT LEAVESDEN. THE MOUNTAINS WERE A HAND-PAINTED FLAT BACKGROUND PANEL. THE DARK PATH CROSSING THE FOREGROUND WAS AN ACCESS GAP THAT THE MODELLERS COULD USE TO REACH IN TO THE CENTRE OF THE MODEL. THE SKY IS DEFINITELY REAL. THIS SET WAS USED FOR THE SCENE WHERE THE MIG FIGHTER CRASHES IN TO THE SEVERNAYA COMPLEX AND BLOWS UP THE DISH AFTER THE FIRST GOLDENEYE IS SET OFF."



Cheat Master

THE BEST GOLDENEYE CHEATS, AND HOW TO UNLOCK THEM

PAINTBALL MODE

■ This aesthetic option swaps out all the bullet holes in the game for lovely splotches of brightly coloured paint. Unfortunately it doesn't affect characters so you can't paint enemies with it.

UNLOCK IT BY: Speed your way through the Dam level on Secret Agent mode in 2:40 or under.

DK MODE

■ This insanely easy-to-unlock cheat distorts all the character models to give them giant heads, tiny bodies and oversized arms. Needless to say it makes it very easy to get headshots with it activated.

UNLOCK IT BY: Finishing the Runway stage in less than five minutes. Even Boris could do that.

INVINCIBLE

■ *GoldenEye* can be pretty tough and some of the later stages are phenomenally hard. Take away some of the pain by making James Bond invincible to everything in the game.

UNLOCK IT BY: Get through Facility on 00 Agent mode in 2:05 minutes or under.

ALL GUNS

■ Why would you not want access to every gun in the game? Of course you would. You can even access the tank using this. Just be aware that weapons won't come with any ammo.

UNLOCK IT BY: Complete Egyptian on 00 Agent difficulty in six minutes or under.

TINY BOND

■ This nifty cheat shrinks you to half your usual size. While the viewpoint does take a while to get used to, it does mean that all enemies find it very hard to hit you. Use this to your advantage.

UNLOCK IT BY: Blast your way through Surface 2 on 00 Agent mode in 4:15 or under.

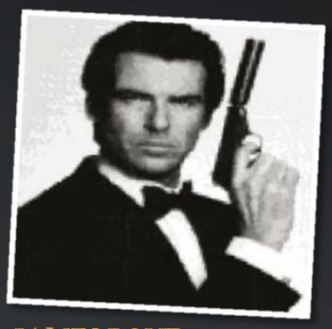
TURBO MODE

■ Make things a little easier for yourself by greatly increasing Bond's mobility, which should make it a lot simpler to escape guards and get yourself out of tricky situations. It does take a while to master, though, so persevere with it.

UNLOCK IT BY: Finish Silo using Agent mode in 3:00 or less.

Heroes And Villains

MEET THE CAST OF GOLDENEYE



JAMES BOND

■ *GoldenEye*'s protagonist is tasked with preventing Janus from firing the *GoldenEye* satellite. Pierce Brosman plays the iconic role and would do for a further three films.

NATALYA SIMONOVA

■ This hacker ends up accompanying Bond on several missions after they encounter each other as prisoners. Izabella Scorupco depicts her in the film.

ALEC TREVELYAN

■ You first meet 006 during the second mission, but see him executed by Colonel Ourumov. Bond soon discovers he's survived and is Janus. He's played by Sean Bean.

XENIA ONATOPP

■ Mercenary Xenia is incredibly dangerous and likes to kill men by squeezing them to death between her thighs. In the film she's played by Famke Janssen.

GENERAL ARKADY OURUMOV

■ The rogue Russian general is a thorn in Bond's side for most of the Arkangelsk missions. He's played by Gottfried John.

BORIS GRISHENKO

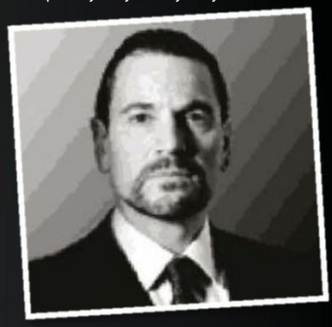
■ "Invincible" computer hacker Boris trips an alarm in Bond's first encounter with him and then pulls a gun on the secret agent. He's played by Alan Cumming.

VALENTIN ZUKOVSKY

■ This Russian gangster helps James Bond out in a couple of levels, as he doesn't want Janus muscling in on his territory. He's played in the movie by Robbie Coltrane.

DIMITRI MISHKIN

■ Mishkin captures Bond and takes him to the Archives level. He eventually admits that he knows Bond isn't a traitor and helps him. He's portrayed by Tchéky Karyo.



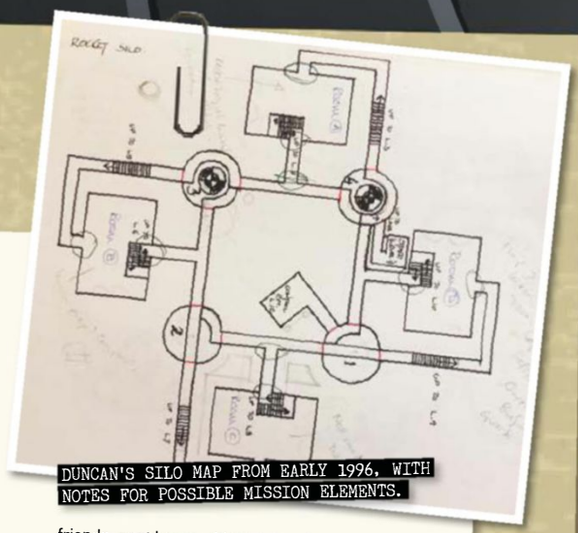
ON HER MAJESTY'S MO-CAP SERVICE

DUNCAN BOTWOOD ON FALLING OVER A LOT

"I often say, 'I died a thousand times for *GoldenEye 007*'," says Duncan Botwood, whose dedication to making the game the best it could be involved physical as well as mental strength. On top of his role as game designer, shaping mission structure as well as the layout of levels, he became the reference model for the various agonising reactions when enemies took a hit. "Motion Capture data was good at picking up very human movements like flinching, and you could easily tell the difference between me throwing myself on the floor versus me being pushed to the floor. So I had to stand in position with my eyes shut so I didn't flinch, and B [Jones] would walk quietly up to me and shove me hard to make me fall over. Multiply that by eight per position because of covering all the angles and you get a full coverage of animations... and bruises."

Duncan, who stayed at Rare until the end of the Noughties and now works for Ubisoft in Canada, assures us it was worth the pain. "I'm sure *GoldenEye* has opened doors for me, though my favourite part has been people coming up to me at work saying they played it at college with their friends, or at home with their family, and loved it. It's great to know that people had such a positive experience and I never tire of hearing it."

He also mentions he specifically designed the Egyptian temple to have high ceilings because he liked using the grenade launcher trajectories to bounce grenades off the top of doors he was running through to take out people chasing him. Now there's a tip for your next deathmatch, folks!



DUNCAN'S SILO MAP FROM EARLY 1996, WITH NOTES FOR POSSIBLE MISSION ELEMENTS.

DUNCAN BACKSTAGE AT E3 IN 1997.

Behind the iron curtain

WRITER DAVID DOAK ON GOLDENEYE'S LEVEL DESIGN

David Doak smiles rather proudly when we ask him about the legacy of his innovative work on mission design and enemy AI for *GoldenEye*. "My favourite moment was meeting the original Valve guys at ECTS, a UK trade show, in 1998 and them joking that *GoldenEye* had forced them to redo a bunch of stuff on *Half-Life*. They went on to do all right."

When David joined the team in late 1995, plenty of the basic gameplay was in place. The controls were responsive, the core loop of 'encounter enemy, shoot them, move to next' worked efficiently and the audio and visuals gave solid feedback. "The obvious issue was that levels were fairly barebones," he explains. "They had been constructed to test gameplay, though even at this stage, there were innovative features which staked out the ambitions for the game, like the alarm system in Severnaya Bunker. It could be triggered by a guard who ran to press a big red button or set off by the cameras 'seeing' Bond. The FPS paradigm of the day was *Doom*, which had you shooting monsters and collecting coloured keys to open doors and we really wanted to step away from that."

» [N64] You can cause all sorts of wanton destruction and if you're lucky, you might damage someone, too.

Though David acknowledges that at its most basic, this involved reskinning the 'keycard' concept with decoders, covert modems and all manner of gadgetry, he was determined to vary the pace and rhythm of levels. "Severnaya Bunker 1 has a lovely, juicy density to it," he enthuses, "a very simple, small space but, particularly on higher difficulties, there is a lot to do with juggling objectives, alarms and enemies. The Bunker 2 cell escape was pleasing to set up; the stealth came together well and was something that felt fresh, in a pre-*Metal Gear Solid* and *Thief* world. And obviously Facility is a continuing source of chuckles that Dr Doak is in there…"

Yes, David makes a prominent cameo as the scientist/secret agent, though most of the team are featured somewhere in the game, whether as the faces of nameless guards or doing silly turns on computer monitors. Despite being satisfied with the variety of mission goals and interesting level design the team achieved, David is the first to admit not everything they tried quite came off. "Some level setups were exercises in damage limitation. For the more open levels like Runway and Depot, it was hard to construct meaningful gameplay and the results are patchy. And the Escort missions seemed like a good idea at the time. I mean, what could possibly be more fun that having your performance judged on whether Natalya would randomly throw her head in the path of a bullet or walk into an explosion?"

Notwithstanding a few misfires, the story mode was groundbreaking in offering the player choices. Should you go in with all golden guns blazing or use your license to kill sparingly? Guards could be sneaked past but how satisfying it proved to take out goons with a flurry of headshots. The way your foes responded to your actions and the surprising, sometimes exasperating, interventions of NPCs all created the sense that this was a living, bleeding world.

"Refining the AI was largely a process of brokering deals with Mark Edmonds," says David. "I'd make my case that a feature would allow me to script a more interesting setup, Mark would shake his head, explain how it wasn't possible then go back to his desk and do some coding wizardry to make it happen. Legend."

» [N64] *GoldenEye* isn't just about killing enemies. Some levels require you to bug things. And also require you to kill enemies…

LOCATION, LOCATION

JETTING AROUND THE WORLD WITH BOND

SEVERNAYA SURFACE 1

■ This tough level requires Bond to make his way into a satellite control bunker. It's tricky as there's lots of open ground and very little cover.

BUNKER 1

■ You're still stuck in Siberia and have to navigate this underground base. Fortunately it's still being built and not heavily armed.

SURFACE 2

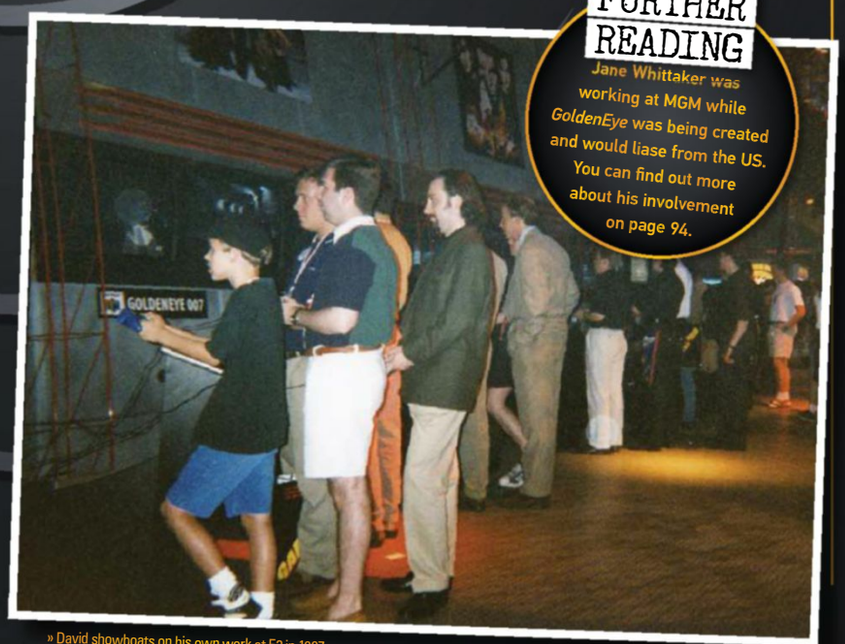
■ The eighth stage sees you returning to Severnaya and it's a tough one. It's hard to see where you are and there are guards everywhere.

BUNKER 2

■ You start this stage holed up in jail next to Natalaya. This is a tough stage as you need to keep her safe whilst retrieving several items.

"Severnaya Bunker 1 has a lovely, juicy density to it"

David Doak



» David showboats on his own work at E3 in 1997.

FURTHER READING

Jane Whittaker was working at MGM while *GoldenEye* was being created and would liase from the US. You can find out more about his involvement on page 94.

Dressed to kill

B Jones on keeping the style and design authentic for GoldenEye

Location, location

Jetting around the world with Bond

Kirghizstan

Silo

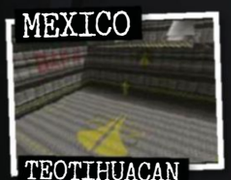
■ This is a tough stage, as you have to navigate bland-looking environments and plant explosives in all the fuel rooms.

Monte Carlo

Frigate

■ Bond's stop in Monte Carlo is so he can plant a bug on a very dangerous helicopter. Unfortunately it's stashed away on an armoured ship.

Mexico



Teotihuacan

■ Congratulations, you've reached one of the secret levels of the game, which is based on the classic Bond film, *Moonraker*.

El-Saghira

■ This stage is only unlocked after completing all the other levels on 00 Agent setting. You need to grab the Golden Gun and stop Baron Samedi.

On the *GoldenEye* credits, B Jones role is listed as 'costume designer'. It might be a tongue-in-cheek reference to the world of film, but it proved surprisingly apt as no one is more adept at fashioning a pixel tuxedo than she is. "We originally had three other Bonds in the game," she explains. "I had to make different tuxedo textures within a 64x32 pixel texture. Moore got the white one with the carnation, Dalton got the double breasted and Connery got the classic Sixties tux. And all their faces came from my reference books."

With no handy internet libraries to consult in the mid-Nineties, much of the look of *GoldenEye* came from B's extensive collection of *Bond* books and memorabilia. Character photos were scanned, gadget manuals were carefully studied and lunchtimes were spent watching the *Bond* back-catalogue on videotape. "We only had a half hour break so we'd get through them in 20 minute segments and it took ages," she laughs.

The team did have some access to the film set and lugged their swanky new digital camera to Leavesden Studios in Hertfordshire to photograph as much as they could. "That camera was huge, really heavy and cost about two grand," she remembers, "but it was how we got most of our reference material, like for Statue Park and inside the main Archanglsk complex both before and after it was blown up. I used that same camera to take the photos of faces we used in the game. I would take front, side and back of the head shots and stitch them together. This was before Photoshop so all I had was this pixel painter called NinGen and just 38x32 pixels for the textures. You try drawing any believable human face in that!"

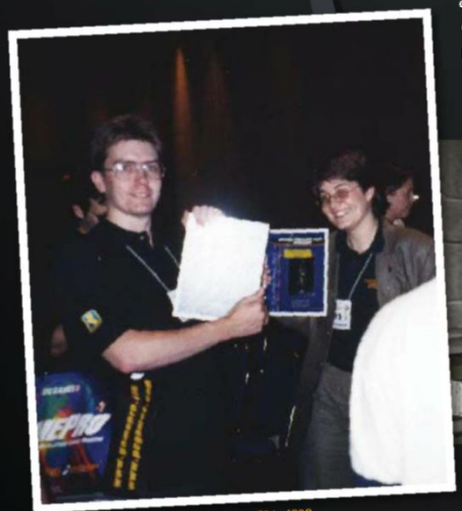
» [N64] They don't appear as often as we'd like, but you do get to play around with the odd *Bond* gadget.

> "We originally had three other Bonds in the game"
>
> B Jones

Two decades on and it's quite easy to raise a Roger Moore-esque eyebrow at the blocky heads in the game but at the time, this was pioneering work, as was the use of motion-capture to give character movement a sense of realism. The initial setup was a 'flock of birds' magnetic system in which all of the markers on the body were directly attached to the computer by cables. "The capturing unit was mounted halfway up one wall and you had to be quite careful with the moves or else it would come flying off the wall and hit the performer," she winces.

Perhaps the most effective use of this new technology was in making your foes look like you'd really slugged them. Shoot them in the shoulder and they would recoil in pain; shoot them in the head and they'd crumple to the floor. "We wanted the animations to look like the victim wasn't expecting it, so we got [team member] Duncan Bottwood to close his eyes and I'd suddenly slap him on the shoulder without telling him. We didn't want that split second of bracing to be visible in the capture. We even had ropes tied around his waist to pull him off his feet. We had plenty of soft mats around but I don't think we could have got away with it in today's health and safety-conscious environment..."

It was this attention to detail in every aspect of *GoldenEye*'s visuals that helped make the game so immersive. Since leaving Rare, B has worked in film and TV, including credits on *Doctor Who* and *Guardians Of The Galaxy*, but still keeps in touch with her old coding buddies. We wonder if she ever felt conscious of being the only woman on the team or if gender stereotypes ever got in the way? "No and no, and clearly you don't know me," she replies, bluntly.



» Steve and B accept the accolades at E3 in 1998.

» [N64] Some levels will end early if you kill civilians that you're not supposed to.

THE SOUND OF GOLDENEYE

WITH GRAEME NORGATE AND GRANT KIRKHOPE

When you joined the *GoldenEye* team, did you think, 'This is the easiest gig in the world we just need to do a version of the theme tune!'?

GN: It was certainly a massive headstart having the *Bond* theme to play around with, but I never thought it was going to be an easy ride. A good theme played badly is still going to absolutely stink! I originally approached the music with more 'variations on the theme' rather than using segments of the theme itself, so tracks like the Train and the Depot are more in the style of *Bond* soundtracks. Then I thought to myself, 'Stop trying to be a clever dick and just use the flipping melodies!'

GK: Graeme asked me to work on *GoldenEye* with him as he was so busy with *Blast Corps*. I had a total love for *Bond* so getting to mess around with that iconic theme was the best thing ever!

Were you at a disadvantage producing music for a cartridge game rather than a CD-based system?

GN: True, the N64 was the only console using cartridges at the time, and with CD you didn't have to worry about RAM limitations. But a cartridge system was more versatile compared to using CD back then, given that we wanted to give the game music some degree of interactivity. For instance, on the Severnaya Bunker level, if an alarm detects the player, the music changes. It's a simple change, but seamless. With a late Nineties CD system, the music would pause while the laser was seeking the appropriate track. A knackered disc or worn out machine and that could be a few seconds... you could have been killed in that time! Plus with a CD, you were limited to about 45 minutes for the soundtrack and we clocked up over two hours for *GoldenEye* in the end.

Let's get techy - what kind of tools were you using to produce the audio?

GK: I was using Cubase as my DAW (Digital Audio Workstation) and I got most of the sounds from a Roland JV 1080 and an EMU Proteus FX. I'd sample instruments and then squash them down as small as they could go without them sounding too horrendous and then get them into the N64 so I could use them.

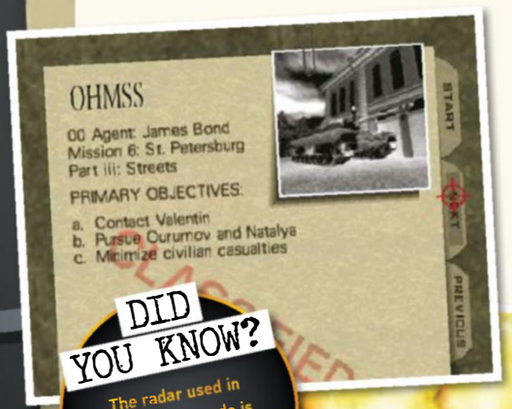
GN: For the first four months, I didn't have N64 hardware so I was writing using synths and samplers with the knowledge that the 'Ultra 64', as it was known then, would be able to play 100 sounds at once. The SNES only had eight sound channels so this was paradise. Or so I thought. Note to self: don't believe the hype. It was possible to play that many sounds as long as you didn't want to do anything else, like display graphics, so 12 to 16 simultaneous notes seemed to be a good compromise. After a couple of months of hard work by Rare's audio coder, we had noises coming out of the hardware.

Audio can sometimes be an afterthought when developing a game...

GK: Not in the eyes of the people at Rare. All the composers were really pushed to write the best music they could. Tim Stamper was particularly on the case when it came to music. He was always asking us to think of ways to make it better.

SOME LEVELS LET YOU DUAL-WIELD. ALTERNATIVELY, CHEAT, THEN EVERY LEVEL OFFERS IT.

> "A CARTRIDGE SYSTEM WAS MORE VERSATILE COMPARED TO USING CD"
>
> Graeme Norgate



DID YOU KNOW?

The radar used in multiplayer mode is actually a texture for the oil drums featured in the game.

EVEN THE WEEDIEST WEAPON CAN CAUSE MASSIVE DAMAGE IF YOU USE IT TO SHOOT OIL DRUMS.

THE FINAL STAGE IS AN EXHILARATING CHASE AGAINST ALEX TREVELYAN.

Reloading Goldeneye

Rare's seminal shooter had its fair share of spinoffs

GoldenEye 007

VIRTUAL BOY

■ There's little info on this canned Virtual Boy game. Not even the name of its publisher. Based on the information available at Unseen64 it would have most likely been released before Rare's N64 hit (the last Virtual Boy game was released in 1996) and it sounds like a *Roadblasters*-inspired driving game.

GoldenEye: Rogue Agent

NINTENDO DS

■ While this is effectively a massively cut-down version of the home console game it's nevertheless different enough to deserve its own separate entry. This was one of the first first-person shooters to be released on the console and it's surprisingly decent to play, too, utilising a similar control system to the *Metroid Prime Hunters*.

GoldenEye 007 Reloaded

PS3, XBOX 360

■ The success of Activision's Wii game meant it received a HD port to the HD consoles of the time. The most obvious change to the game is enhanced graphics, but changes have been made elsewhere as well. There's also a new M16 mode, which offers objective-based missions once the original story has been rinsed.

GoldenEye: Rogue Agent

XBOX, GAMECUBE, PS2

■ EA' previous three *Bond* games, *Agent Under Fire*, *Nightfire* and *Everything Or Nothing* had done well commercially and this was a 'sequel' to the greatest *Bond* game of all time. What could go wrong? Well everything really. It was incredibly weak, with mechanics largely revolving around the abilities of your agent's *literal golden eye.*

GoldenEye 007

WII

■ Activision's second Bond game remains the best-received game of its four releases. The biggest change is that Pierce Brosnan has been replaced with Daniel Craig. Mechanically it's been updated, too, taking into account more modern FPS tropes like regenerating health and destructible environments.

GoldenEye 007

XBOX 360

■ Ah, what could have been. News of a Xbox 360 version of *GoldenEye* first arrived in 2008 but then development stalled. It wasn't until 2016 that popular Rare source, Rare Thief uploaded 30 minutes of footage to YouTube, allowing gamers to see what would have most likely been the definitive version of Rare's hit game.

DID YOU KNOW?

The tea n initially p anned to reload guns by unplugging and reinserting the controller's rumble pak, but Nintendo soon quashed the idea.

Licence to Thrill

How Rare adapted a Bond movie for joypads

Karl Hilton can still remember when Martin Hollis popped the question. "He opened with, 'Do you like *James Bond*?'" chuckles Karl, who was the first person to join Martin on the team as lead artist. "I was a big *Bond* fan and it sounded great fun but I was definitely worried about the reputation that movie tie-in games had back then. I'd just started at Rare and knew they didn't release bad games but I do remember looking at *Blast Corps*, which was being made next door to us, and thinking it would probably be much more popular than the movie-tie in we were starting on."

Given some of the licensed dross released prior to *GoldenEye*, Karl's concerns were understandable, though at least with their game they had some support from the production company. Visits to the studio allowed much useful photography of sets, props and costumes to be taken and the team received a draft of the script. "We weren't given any strict guidelines on what we could do so we immediately started 'padding' out the story to generate more content," explains Karl. "We wanted to visit all of the major locations even if Bond doesn't go there in the film. Plus we could use almost anything from the *Bond* universe."

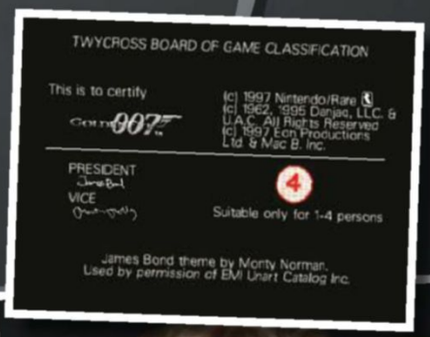
Karl saw the potential for drawing on the older Bond films he had grown up with, particularly those starring his favourite Bond, Roger Moore. He initially wanted to include the Liparus submarine base from *The Spy Who Loved Me* but realising this was too complex, he instead opted for the Drax shuttle base from *Moonraker*. The many nods to the wider Bond world and the clever way the camera flew into the back of 007's head at the start of each level really helped players feel like they were morphing into the suave secret agent. "We wanted to emphasise that the player was James Bond but in an FPS you rarely get a chance to see yourself," Karl says. "This seemed like a perfect way to remind the player. Roger Moore played Bond, Pierce Brosnan was playing Bond at the time, now you can step into Bond's shoes, too."

Subtle touches, like the cinematic curtain of blood that descends the screen when you die and the cuff of your tuxedo clearly visible when you check your watch for important mission information, all added to that authentic Bond feel. The watch also served another purpose, explains Karl. "We all agreed that keeping screen clutter to a minimum would give you the most immersive feeling and the watch helped you feel like you were 007 and not a generic FPS player. Although we did always joke about how short-sighted our Bond appeared to be, staring at his watch so closely."

Which brings us to our key question: just how important was the licence? The game was undeniably an exceptionally well-crafted shooter, with many innovative features, but without *Bond*, would it have had the same critical and commercial success? "What could have been construed as a violent first person shooter was opened up to a much broader family audience because, culturally, James Bond is allowed to kill people and not be seen as bad," argues Karl. "It meant children could ask parents for the game! I hope it would have done well anyway that but I doubt it would have had the penetration into popular culture that the James Bond link gave it. I think *Perfect Dark* supports this to some degree. It was, in almost every way, superior to *GoldenEye*, as we'd learned so much from our first game-making attempt, yet it sold less than half [the copies]. The chance to play as James Bond is a great selling point."

» [N64] The Sean Bean Principle applies to *GoldenEye*. Spoilers: he dies.

> **"We wanted to emphasise that the player was James Bond"**
> Karl Hilton


TWYCROSS BOARD OF GAME CLASSIFICATION
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PRESIDENT
VICE
4
Suitable only for 1-4 persons
James Bond theme by Monty Norman.
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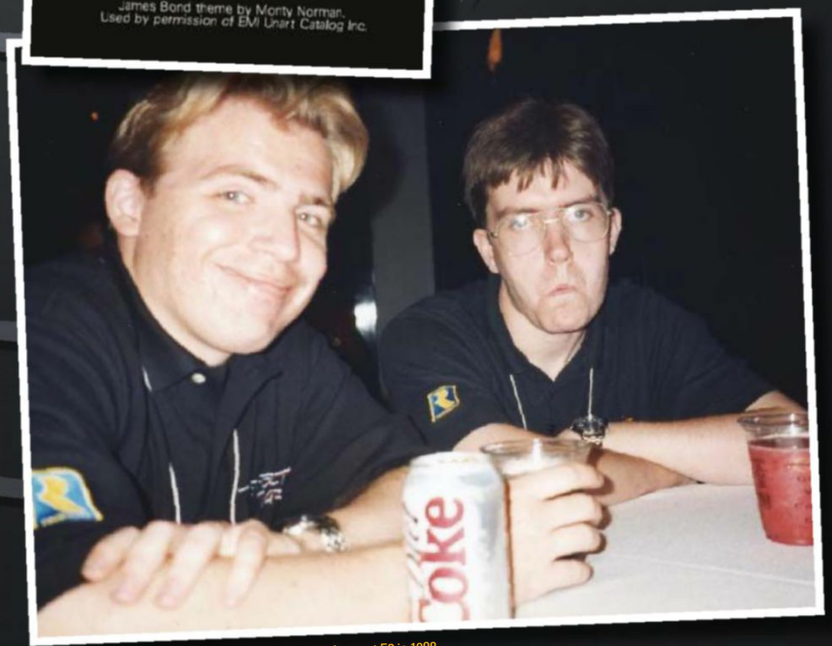


» Karl (left) and Steve compare their happy/sad faces at E3 in 1998

Location, Location

Jetting around the world with Bond

St Petersburgh

Statue

■ The first of five stages set in Russia's second biggest city. Here, you have to meet up with ex-KGB agent, Valentin Zukovsky.

Archives

■ The large level requires you to escape from several of Dimitri Mishkin's men and rescue Natalaya.

Streets

■ There are two ways through the stage and it's being timed, so you can't dawdle on either. Luckily, you gain access to a tank.

Depot

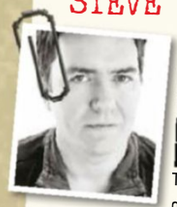
■ This rather dull stage has you trying to locate Alec Trevelyan's train. It's easier said than done, though.

Train

■ The last level of St Petersberg is excellent as it requires you to fight your way through an incredibly well-guarded train.

MULTIPLAYER MADNESS

STEVE ELLIS ON MURDERING YOUR FRIENDS



Had *GoldenEye*'s multiplayer modes always been on the 'wish list' of features?

To be honest, I don't remember discussing multiplayer before we started doing it. We'd been too busy making the rest of the game! It wasn't until something like April 1997 that work actually started on it and it progressed incredibly quickly by today's standards. Because it came so late in development, we had already finished work on the animation so we had to make do without any animation for moving while crouching. There just wasn't time to do anything about that.

Was multiplayer prompted by you and the team playing *Bomberman* or *Doom* deathmatches together?

I don't think we ever played multiplayer *Doom* because we didn't have any PCs but we certainly spent a lot of time playing *Bomberman* at lunchtimes and we also had an early, unfinished version of *Mario Kart 64*. It was more that the things which would be good seemed obvious to us, and we just got on with doing them and playing the game every day to see what was working and what wasn't.

EVERYONE MAKES A BEELINE FOR THE GOLDEN GUN IN MULTIPLAYER BUT JAMES BOND GOT TO IT FIRST.

How did you go about turning an almost complete single player game into a multiplayer one?

I had to introduce the concept of a 'player' into the game and gather all of the player's properties – their position, direction, health, ammo, animations and hundreds of others – into one place and then go through all of the tens of thousands of lines of code and make sure that anything that accessed player data was aware that there might be more than one player in the game. Hundreds, possibly thousands, of now-invalid assumptions had to be fixed, one by one. And because the game had been coded in C, which doesn't encourage programmers to be as structured as they would be with C++, the code had been written in a fairly freeform way with bits and pieces of data scattered all over the codebase.

It sounds a mammoth task.

We didn't know whether it would work when we started. My biggest doubt was whether it could work at an acceptable framerate. If it was going to be rendering up to four times as many triangles, maybe it would run at a quarter of the frame rate and be unplayable? The only way to find out was to do it, and of course some of the levels weren't available in multiplayer for those exact reasons, but luckily a good number of them performed well enough that it was worth continuing.

Didn't you keep everything multiplayer secret from the Stamper brothers?

I wasn't under instructions to frantically switch to another window if Chris Stamper entered the building, but then we didn't tend to see much of

DUNCAN BOTWOOD'S MAP OF SEVERNAYA EXTERIOR, CIRCA 1996, THE BLUE INDICATES GUARD PATROL ROUTES.

"MY DOUBT WAS WHETHER IT COULD WORK AT AN ACCEPTABLE FRAMERATE"

Steve Ellis

him so it would have been easy to keep it quiet without trying. I can't remember exactly when Martin told them about it, but it was well after the proof-of-concept stage. Obviously I was proud of what we'd achieved and Chris's reaction to good work was always positive.

Didn't Chris worry that multiplayer wouldn't be fun because you can see where your opponents are?

I never thought split-screen would have that kind of problem because if you're spending time looking at the other screens, you're probably not looking at your own enough to stay alive. I do remember arguing with Karl Hilton about the radars. He hated them so eventually I added a cheat to allow players to switch them off. It said something like 'Happy now, Karl?' when you activated it.

Multiplayer wasn't all you worked on, of course.

Growing up, I'd spent a long time doing assembly language programming on the Spectrum and later the Amiga, so I did a lot of low-level programming and optimisation for *GoldenEye* like texture mapping, RSP Microcode and demand-paged virtual memory, which simulates having more RAM than you actually do have by fetching things into memory only when they're needed. Sorry to get technical. I worked on visual effects like explosions, smoke and bullet holes and added the hidden Spectrum emulator. Lots of other stuff.

How important was multiplayer to the success of *GoldenEye*?

I think it challenged some people's assumptions about how fun split-screen multiplayer could be and I think it got a lot of attention for that. Without it, I don't think we'd be talking so much about the game 20 years later, despite its other 'firsts'.

Huge thanks to all the team for their time and to Graeme, Duncan and Karl for use of their original photos and artwork.

DID YOU KNOW?

GoldenEye features a ZX Spectrum emulator and ten games, buried deep within the code. You can access it with a N64 emulator and the relevant patch.

LOCATION, LOCATION

JETTING AROUND THE WORLD WITH BOND

CUBA

JUNGLE

■ You've been shot down by a missile and must escape this guard-infested jungle. You'll also have to watch out for Xenia Onatopp.

CONTROL

■ This mission has you leading Natalaya to a computer so she can hack it. You'll come under fire once she starts, so protect her.

CAVERNS

■ Here you navigate lots of identical looking caves and finding security cards to open otherwise impenetrable doors. Not fun.

CRADLE

■ The final stage features another time limit and has you trying to stop Trevelyan from realigning the GoldenEye satellite.

SHOOT TO KILL

OUR OWN PERSONAL PICKS FROM Q'S LAB

SNIPER RIFLE

■ It's certainly not the easiest gun to use, but it does have amazing range, allowing you to kill from a safe distance, without fear of being shot.

AUTOMATIC SHOTGUN

■ You'll need to get close, which isn't ideal, but the reward is a powerful blast that will turn your opponent's insides into mincemeat.

ROCKET LAUNCHER

■ The great thing about this piece of metal is that you don't need to be super-accurate. Just make sure to get them in the blast radius.

REMOTE/ PROXIMITY MINE

■ Perfect for those levels that have lots of annoying nooks. Plant a couple and wait for your opponent's swears of frustration.

GOLDEN GUN

■ It's only available in the story mode via cheats, but it was available to use in multiplier mode. It's highly coveted because it can kill with a single shot.

KF7 SOVIET

■ This is possibly one of the most balanced weapons in the game, with good ammo, decent range and plenty of stopping power.

KLOBB

■ Named after Nintendo's Ken Lobb, this wonderfully pathetic piece of hardware is only really worth using when paired. It's such an iconic gun we had to include it.

RC-P90

■ This weapon has everything – great penetration, an insane magazine capacity and extremely good damage. It also fires ridiculously fast.

DD44 DOSTOVEI

■ It's not quite as accurate as the PP7, but it does carry more bullets and we all know that it's bullets that kill people.

MILITARY LASER

■ This laser has no ammo limitations, making it extremely useful in a gunfight. It also boasts fantastic stopping power and looks cool.

GRENADE

■ You have to be quite skilled at throwing them, but the splash damage caused by lobbing a well-timed grenade should not be underestimated. Lob em and run.

COUGAR MAGNUM

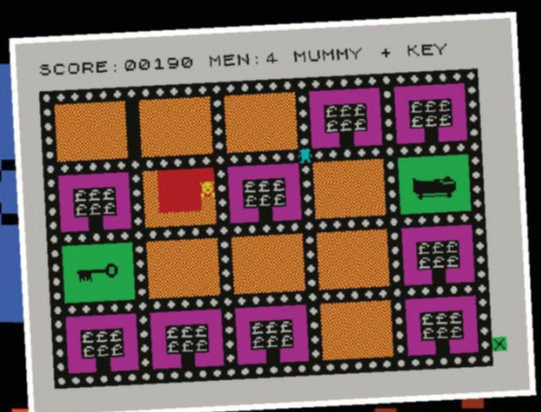
■ Accuracy is massively impaired but the stopping power on this thing will halt a rhino. Plus it makes you feel like you're Clint Eastwood, which is nice.

OH MUMMY!!

THE FIRST GAME YOU PLAYED ON YOUR NEW COMPUTER AS A KID OFTEN LEAVES A LASTING IMPRESSION AND NEVER WAS THAT TRUER THAN WITH OH MUMMY, SO WE SENT KIEREN HAWKEN INTO THE TOMB TO PLUNDER ITS STORY

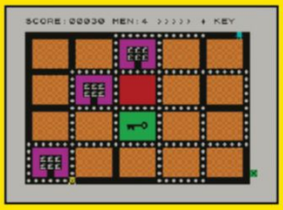
When Amstrad entered the home computer market in 1984, Alan Sugar already knew that no matter how it promoted its new computer range games would play a big part of its success. So, with this in mind, he hastily created the Amsoft label, to both produce new games for the CPC range and licence older games, too. One of the first companies he turned to for help was the little-known Gem Software, as it had already released a number of games for the CPC's biggest rival – the ZX Spectrum. One of those games was *Oh Mummy,* an interesting take on the Konami arcade game *Amidar* that featured an intriguing Egyptian theme. This game was ported over to the CPC fairly quickly and would end up being one of the titles that was bundled with the tape-based Amstrad CPC 464. Some two years later Alan Sugar was completing the purchase of the Sinclair brand and, more specifically, the ZX Spectrum computer, from his great rival Sir Clive Sinclair. Once again, he knew the importance of bundling games with a computer and for the debut of the Sinclair ZX Spectrum +2, with its CPC-style built-in tape deck, he once again turned to Gem Software to do the honours. Because of this, the Amsoft rerelease of *Oh Mummy* for the ZX Spectrum and the new Amstrad CPC version would be the very first game many people played when they unwrapped their shiny new computers on Christmas or their birthday, and the enjoyable arcade-style gameplay meant that it remained a favourite thereafter.

Oh Mummy was the creation of John Line and Daren White, who would end up purchasing Gem Software themselves after the company hit financial difficulties. The initial version of the game was released for the ZX Spectrum in April 1984 with versions for other Z80-based machines following later that year. While many recognise the game as an Amidar clone Daren himself cites a different inspiration. "It was actually a derivative that we based *Oh Mummy* on, a game called *Painter*," he reveals. "There was also, a touch of *Pac-man* in there too!" For those that might not have played *Amidar* or *Painter* we'll fill you in. In the game you control a character who must run around a maze, which is set up in a grid pattern, and 'colour in' all the squares by moving around the entire perimeter. Once you light up every square you move onto the next level. This might sound easy but there are also enemies running around trying to stop you doing this, so you have work the best way to avoid them. As well as utilising an Egyptian theme, *Oh*



» [ZX Spectrum] You only have a few seconds to escape a cursed tomb.

CONVERSION CAPERS

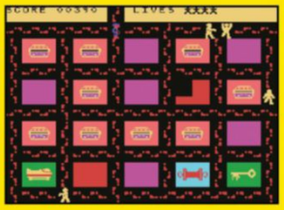


ZX SPECTRUM

■ The original version of the game is so simple when it comes to the graphics and sound you could almost be excused for thinking it was programmed in BASIC. Thankfully, it's just as fun to play as any of the other iterations.

AMSTRAD CPC

■ One of the most interesting things about this upgraded CPC port is that the main character now appears to be Roland! We can only assume that his name was originally going to be added into the title somehow.

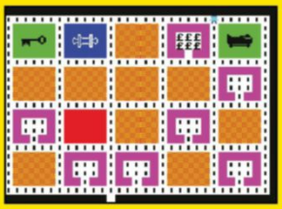


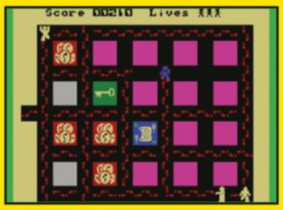
TATUNG EINSTEIN

■ A favourite computer with game developers back in the day, the Einstein version is a considerable upgrade over the ZX Spectrum original and features some particularly nice and colourful graphics. Well worth a look.

CAMPUTERS LYNX

■ *Oh Mummy* on the Camputers Lynx is probably most similar to the original Spectrum version, albeit a bit more colourful. This isn't a computer that's very well known for its games so *Oh Mummy* is a standout title here.



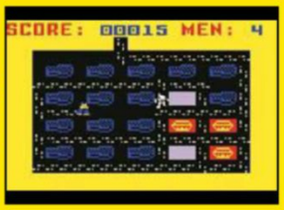


MSX

■ Given the many similarities in the hardware it's not surprising to discover that this MSX port is virtually identical to the Einstein conversion. We very much liked the in-game music here even if it does get a bit repetitive after a while.

IOS

■ This mobile version, released in 2009, features a number of upgrades over the original such as new graphics and sound as well as new items that can be collected. We just wish you could choose the original version, too.



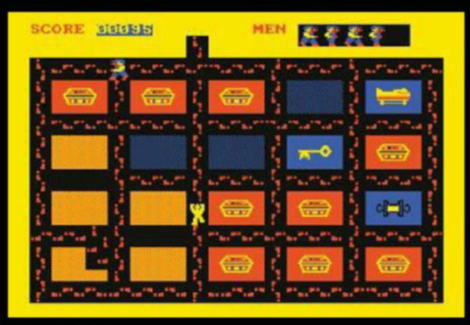
INTELLIVISION

■ Released in 2016, this port is similar to the Amstrad version of the game, which it was actually based upon. It works surprisingly well with the awkward Intellivision disc controller and provides a good challenge.

MEGA DRIVE

■ *Oh Mummy Genesis* (2012) is actually billed as a sequel to the original, which is included as a bonus extra on the cart, and has lots of new features included and a wonderful story mode. This is a more than worthy update.

Mummy also adds some extra gameplay elements such as cursed tombs that reveal extra monsters, magic scrolls, valuable sarcophagus artefacts and, crucially, keys, which must be found in order to reveal the level's exit. "Egypt was an interest of mine, as I was really into magic at the time and it's difficult not to research Egypt when looking into that subject," says Daren. "Also, we just needed a rational for the game, and we decided that the player was being chased by mummies! Once the mummy idea was there, we just brainstormed for extra gameplay ideas and these just happened to pop into our heads."



» [Amstrad CPC] You've got the scroll, you've got the key, now head to the exit before that mummy escapes the tomb!

» [ZX Spectrum] The intro in the Spectrum version explains all the items you'll come across in the game.

The Amstrad deal played out well for Gem Software, and Daren remembers how it all came about well. "When I first joined Gem Software it was a limited company and I was just an employee," he says. "However, they went bust a year or so later after it started having problems with some of the larger distributors not paying up. After this, John, Sandy (John's wife) and myself formed a new partnership, keeping the name Gem Software. We didn't become the owners of the company until after *Oh Mummy*, so the Amsoft deal came about after the original Gem Software partnership had been dissolved. Amstrad approached a few developers to see if they had any games that could be bundled with their machines. We offered them *Disco Dan*, *Roland In Time*, *Roland Goes Digging* and, of course, *Oh Mummy*. I don't know much more than this as the deal was mostly handled by John and Sandy."

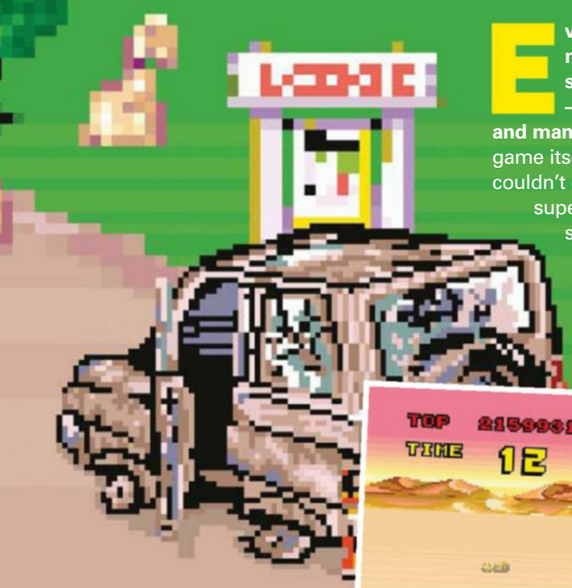
Now, we can't let Daren go without asking him a few questions about *Oh Mummy*'s legacy. The popularity of the game among retro fans has seen more recent ports to the Mattel Intellivision, PC, iOS, the Vector-06C computer and an enhanced update for the Mega Drive. We wonder if Daren himself had seen or played any these tribute versions. "I did see the Mega Drive version and the iPhone versions," he says, "but not until a couple of years ago when I looked into doing a remake of *Oh Mummy* for modern machines." He adds, "Both versions were very good indeed and a pleasure to see. It's always nice to see homage to your work." To this very day Daren is also still extremely surprised at just how fondly the *Oh Mummy* is remembered. "I still run into people who are delighted when they find out I made *Oh Mummy*. The last one was when I was working at Samsung R&D, one of the programmers there told me his mum was a massive fan. So I gave them a signed copy of one of my remaining *Oh Mummy* tapes and she was over the moon!"

Special thanks to Daren White.

ENDURO

Enduro Racer

Enduro Racer was released around the same time as Sega's OutRun, but was it a case of four wheels good, two wheels better? Martyn Carroll shines a light on Sega's often-overlooked dirt bike racer



» [Arcade] Pulling a wheelie just before you hit a ramp is critical for a successful jump.

Everyone remembers *Hang-On*, Sega's motorbike racing arcade game. More specifically, everyone remembers its cab – a striking red bike that players sat on and manoeuvred using their body weight. The game itself was a little less exciting. You certainly couldn't call it pedestrian, thanks to Sega's super-fast sprite-scaling hardware, but its simulation tendencies were obvious with its flat track and signposted corners that required players to observe racing lines.

There was no such pretence with *Enduro Racer*. This, too, was a motorbike game from Yu Suzuki and his Sega AM2 team, and it ran on the exact same hardware as *Hang-On*, yet it was designed as a pure arcade racer. Smooth tarmacked tracks were replaced by rolling off-road courses that were strewn with hills, jumps and obstacles. Compared to *Hang-On*, *Enduro Racer* was a more tactile experience with you ragging your bike through the game's five stages with zero grace.

Jumping was the game's key gimmick. To successfully jump you had to pull a wheelie before hitting a ramp which was done by yanking the handlebars upwards. You then had to grip the bars up until you landed on the other side. If you hit a ramp without your front wheel up you'd crash on landing. Similarly, if you landed with your front wheel down, your rider would flip up off his seat and you'd lose some speed, but you wouldn't crash. When performed correctly, and at high speed, jumping was a real thrill. Sadly, players were never really allowed to enjoy the experience thanks to the game's brutal difficulty level.

Instead of easing players in and giving them a chance to try-out the jumping mechanic, the first stage featured lots of pesky rocks after the jumps (which were tricky to avoid) and most of the ramps were positioned on bends (so it ▶

ENDURO EXPERT

JUMP AROUND

■ Mastering – or at least grasping – jumping is the key to a good run. You need to perform a wheelie a split-second before the jump, then hold it in the air before dropping the handlebars immediately after hitting the ground.

LINE OF TYRE

■ Many jumps are positioned on corners, or have corners directly after them. In each case you need to line up your bike and hit the ramp in the correct place so you land safely on the track and don't slam into the roadside scenery.

IN THE DRINK

■ The swampy third stage features water on both sides of the track, and if you venture too far into it you'll sink! Up until now you probably haven't had to brake much at all, but here you'll want to ease off on the tighter corners.

GO AROUND

■ You don't have to jump on every ramp. It's sometimes possible to sneak around the side and thereby avoid the unpredictability of jumping. Be warned that you may still have to weave through the obstacles after the jump.

JEEP SHOT

■ It's rare that you'll come a cropper by smashing into rival bikers, but the jeeps that enter the fray on stage two are a trickier challenge. Give them a wide birth where you can, and watch out for broken-down jeeps around the track.

HEED LIFE ADVICE

■ If you do somehow manage to reach the end of stage five, take on board the wise words that appear to congratulate you. It's pretty deep bro, and its positive vibes will make up for all those times you crashed face-first into a cactus.

» [Arcade] Your progress through the game's five stages is plotted on the results screen.

▶ was all too easy to over-jump the track as you couldn't change the direction of your bike mid-air). The second stage was even worse as it introduced tighter bends, track-hogging jeeps and random obstacles in your way. Then the third stage added water jumps to the mix! All this was set against a tight time limit that allowed for one or possibly two bad crashes at the most. *OutRun* was also criticised for its difficulty, but that game never felt unfair. With *Enduro Racer* there was a strong feeling that the game was engineered to take your cash and then buck you off the bike at the earliest opportunity. Nevertheless, the game was a mainstay in the arcades, usually lined up alongside Sega's other 'physical experience' titles like *Hang-On*, *Space Harrier*, *OutRun* and *After Burner*.

Like those games, *Enduro Racer* came in a variety of cabinet styles. There was the regular stand-up model, which had the handlebars attached directly to the control panel (as with *Hang-On*, the handlebars incorporated a hand throttle and brake). Then there was the variation sit-down model, which ▶

» [Arcade] Smashed into a rock with zero seconds on the clock. Welcome to *Enduro Racer*!

CONVERSION CAPERS

MASTER SYSTEM 1987

■ Look at all the versions and spot the difference! Okay so this clearly isn't *Enduro Racer* as we know it, but this isometric revamp is a fun racer in its own right. Some nice touches like being able to tune-up your bike between stages adds appeal to what is a neat time-waster.

COMMODORE 64 1987

■ The C64 game is not the abject disaster that many proclaim it to be, but it does fail to deliver the thrills of the arcade version. The graphics are poor, too, with the bikes resembling spluttering mopeds! Great music, but overall it's just too slow and stodgy to be enjoyable.

ZX SPECTRUM 1987

■ This is a nice surprise on the Speccy. Not only does it look like *Enduro Racer* but it recreates the feel (if not quite the speed) of the original to a decent degree. Good AY music on the 128K version completes what is rightfully considered one of the best racers on the machine.

AMSTRAD CPC 1987

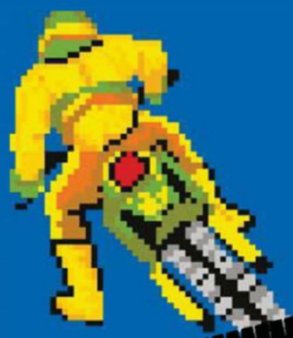
■ This quickie conversion by Mev Dinc looks almost identical to the Spectrum version on which it's based, but fails to hit the same framerate. Not only is speed sacrificed but the controls are less responsive too, sapping much of the excitement from the game.

THOMSON MO/TO 1988

■ This conversion for the Thomson range of French computers is based on the Spectrum version, but runs even slower that the CPC release. This is no doubt due to the code being ported from the Z80 to the Thomson's 6809 processor. Not unplayable, just unsatisfying.

ATARI ST 1988

■ The sole 16-bit conversion is a solid attempt by the same team behind the Spectrum version. It's not the smoothest game but it is fast, and it features a fantastic soundtrack from David Whittaker. If you're slightly mad you can use the mouse to control your bike!



"Enduro Racer was definitely a stepping stone that allowed us to do the later conversions like OutRun"

Alan Laird

RACING HERO

Alan Laird converted Enduro Racer to the Spectrum and Atari ST with Ian Morrison

How did you land the contract to convert *Enduro Racer*?

Myself and Ian knew some of the Activision UK people that came from Quicksilva so we took our original driving game, *Nightmare Rally,* to show them. They didn't pick it up – Ocean took that in the end – but when Activision got the licence for *Enduro Racer* they knew who to speak to.

Did developing *Nightmare Rally* help when it came to doing *Enduro Racer*?

Yes, very much so. Each of our driving games was an evolution of the previous one. The *Enduro* engine was actually primitive. It couldn't do proper hill effects and it was limited to three radii of corners, each one of a fixed length, and each had to have a straight in between long enough for the previous corner to move completely off the screen.

Did you have access to the coin-op, or any assets from Sega, during development?

All we had was a VHS tape of someone playing the arcade game through and maybe some promo material. I don't think I ever saw an *Enduro Racer* machine in real life.

How did working on the Atari ST version compare to the Spectrum?

I didn't do a whole lot on the ST version. I remember it being more of a pain to work with than the Spectrum. It wasn't that much faster, really and there was a lot more video memory to move around. So actually it was rather less satisfying.

» [ZX Spectrum] The Speccy version of *Enduro Racer* was one of the better conversions around at the time.

How important was the *Enduro Racer* job for your career? Did it open any doors for you?

Enduro Racer was definitely a stepping stone that allowed us to do the later conversions like *OutRun* and *Turbo OutRun* for Probe. Like I say it was an evolution with each one building on the last and becoming technically better – but not always faster! I wouldn't really think of games as my career though. I did stick with software, and that's still what I do, but games were more of sideline for me. I'm proud of what I did at the time but looking back it's obvious that there were a few sharp business practices going on that allowed a few people to become very wealthy off the back of the efforts of young people like ourselves.

» [Arcade] You line up against four other riders but this is very much a solo race, with the odds stacked heavily against you.

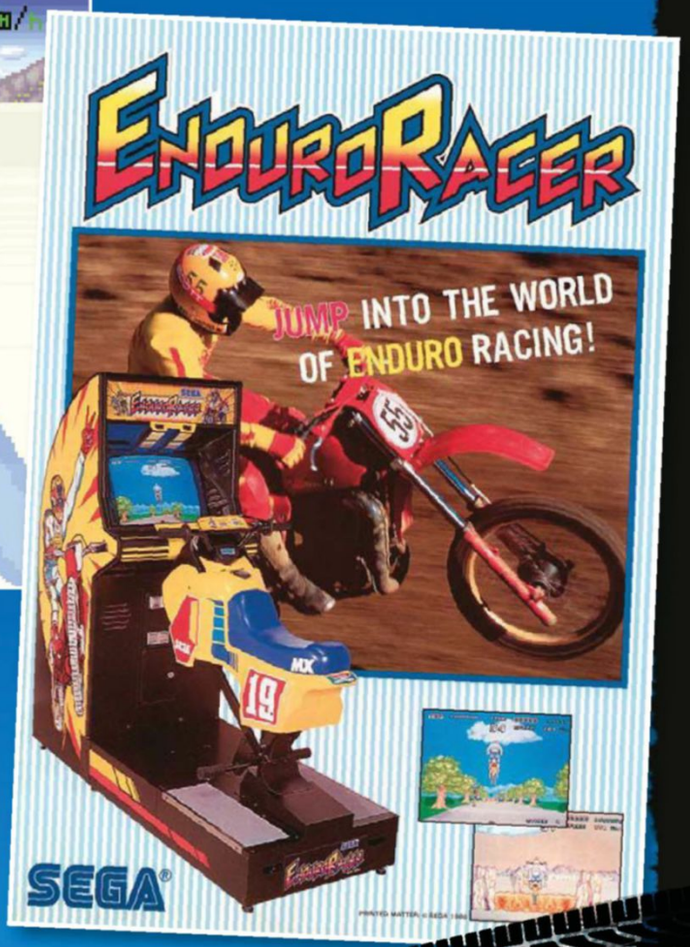
was the same as the regular model except the foot step was replaced with a static seat modelled on a dirt bike. Finally there was the deluxe 'wheelie' model that featured a bigger bike seat that incorporated the handlebars and players had to tilt back and forth to pop wheelies. All models displayed the game on a standard 20-inch monitor.

As you'd imagine it was the impressive 'wheelie' version that was used to showcase *Enduro Racer* when it premiered at arcade shows in late 1986. EMAP's regular coin-op reporter Clare Edgeley was a fan, calling it 'brilliant' in a write-up for *C&VG* magazine. "*Enduro Racer* is timeless and very addictive," she wrote. "The feeling of riding a bike is tremendous. It's totally different in gameplay to *Hang-On*."

» [Arcade] Faceplanting the floor after hitting a rock. Yup, looks like a typical **Retro Gamer** playthrough.

Perhaps due to its arcade nature the game received far more home conversions than *Hang-On* ever did. In Europe Activision grabbed the rights and produced versions for the Commodore 64,

» [Arcade] The finish line is in sight. Don't mess it up now!



ZX Spectrum, Amstrad CPC, Thomson MO, and Atari ST computers. Of those the highlights were the Spectrum and ST versions which were both developed by Giga Games (Ian Morrison and Alan Laird). The worst was the C64 version which seemed to be stuck in first gear and received a miserly 16% from *Zzap!64*. Despite the critics dropping a bomb on the game, it sold very well and prompted the development of a follow-up. "Activision is releasing an improved version of its undeserved bestseller *Enduro Racer*," revealed *Zzap* in its December 1987 issue. This new version was being coded by Nick 'Orlando' Pelling and developed for release on disk. Nick says: "There were indeed two versions of the C64 game: a tape version which *Zzap* panned and a disk-only version which I worked on, but which may never have officially been released. I really liked my version. As I recall, it was accidentally released on a compilation disk many years later." As Nick recalls, his version did appear on a Beau-Jolly collection and despite not being 100 per cent finished, it was shaping up to be a clear cut above the existing C64 game.

Surprisingly there was only a single home console conversion of *Enduro Racer* and that was for the Sega Master System. More surprising still, Sega chose not to adapt the coin-op at all and instead created a distinctive isometric racing game which resulted in a very different (though not disagreeable) experience. For the full version you needed to play Sega's original release for its Japanese Mark III console as the Master System port was inexplicably released on a smaller cart which meant that five of the original ten tracks and lots of graphics had to be removed due to lack of space.

Besides the Master System version making an appearance on the Wii Virtual Console in 2008, *Enduro Racer* hasn't been revisited by Sega. There was no Mega Drive version, no Sega Ages update, no coin-op cameo in *Shenmue*, no *3D Classics* remake for the Nintendo 3DS, no inclusion on any retro collection. Today, it's essentially a forgotten title, by the company at least, and you can't say that about many Yu Suzuki creations.

Sega may have neglected *Enduro Racer* but it did rekindle the spirit of the game for its 1992 arcade-only coin-op *Stadium Cross*. As the title suggests, the game featured circuits rather than one continuous course, and the emphasis was on multiplayer (the standard cab supported two players, and four cabs could be connected for eight-player melees), but at its heart was a jumping mechanic where – you've guessed it – you had to pull back on the bike when hitting the ramps. This would send your rider soaring through the air, evoking strong memories of the fun, if flawed, *Enduro Racer*.

» [Arcade] Pulling off a flawless jump is a tricky feat.

"There were two versions of the C64 game: a tape version and a disk-only version which I worked on"

Nick Pelling

CLASSIC MOMENTS

Samurai Shodown

» **PLATFORM:** NEO-GEO » **DEVELOPER:** SNK » **RELEASED:** 1993

We're suckers for a fighting game character with a strong gimmick. Well, most of the team are, apart from Nick who always picks the default. Who were the most interesting characters in *Street Fighter II*? As far as we're concerned, the only correct answer is Vega, because he could bounce off walls and lose his claw weapon.

So when *Samurai Shodown* came along and we first laid eyes on Nakoruru, we were a little bit excited to say the least, and not just because of Darran's love of birds. Here's a fighter who spends all of her time accompanied by a hawk named Mamahaha, and it's more than just a cute quirk. At Nakoruru's command, a flaming Mamahaha will dive headfirst into an enemy at incredible speed, with the angle of attack depending on which attack strength you use. Not only is it a very early use of a satellite character, an innovative concept in fighting games, but it's incredibly useful. And – sorry, dog lovers – Mamahaha is just cooler than Galford's husky Poppy.

BIO

By the summer of 1993, SNK had started to establish the fighting game specialism for which it would become famous. *Fatal Fury* was already up to its second game, with a revised special edition in the works, and *Art Of Fighting* was also doing good business. This was the background against which *Samurai Shodown* emerged, and it quickly found favour thanks to its tense, high-damage bouts and historical theme. The game proved to be a huge hit and was quickly ported to the major home consoles and handhelds of the day, with the first of many sequels following in 1994.

MORE CLASSIC SAMURAI SHODOWN MOMENTS

Straight-up Murder

Samurai Shodown certainly wasn't the first fighting game to let you kill someone, but that doesn't diminish how cool it is when it happens. There are a few different possibilities, but we're partial to the animation where blood gushes from the opponent's wounded neck, until they dramatically collapse to the floor.

Bigger Than Your Dad

Some Neo-Geo fighters made every character huge, but *Samurai Shodown* decided upon a smaller cast to emphasise the enormous bulk of Earthquake, who happens to be about twice the size of a regular fighter. We'll never forget seeing him for the first time and wondering how – or if – he could be beaten.

Weapon Clash

When two fighters go to attack at the same time, they lock blades and battle for position, with the loser of the clash dropping his weapon as they disengage. A button-mashing fury follows, though it turns out that it might not matter – one conversion programmer claimed that the buttons never did anything.

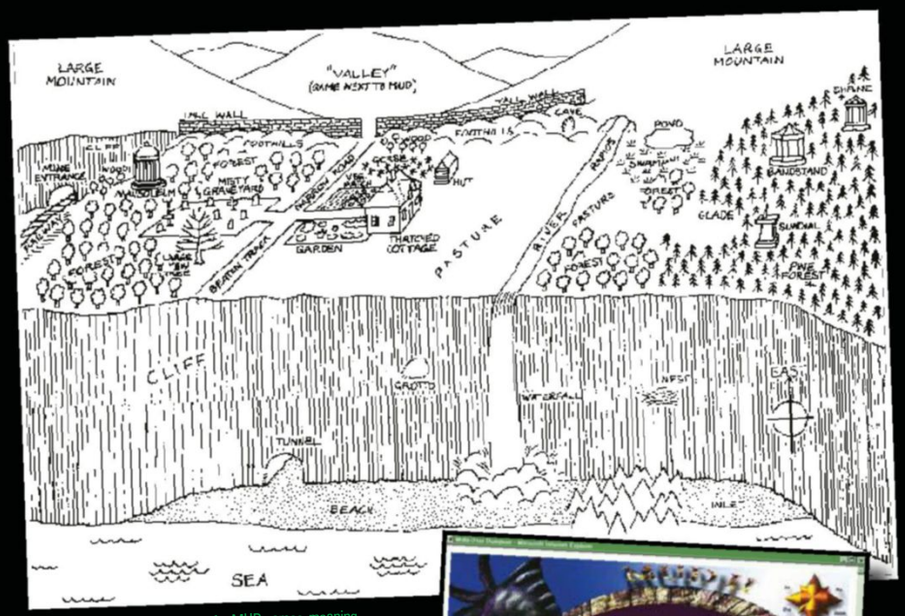
Get Some Perspective

One of the key features of the Neo-Geo hardware was sprite scaling, and this was put to use in spectacular fashion here. Where other fighting games constraining the player's movements to the edge of the visible playfield, *Samurai Shodown* zooms out to show both fighters if they move too far apart, showing more of the magnificent background art.

THE STORY OF MUD:

THE ORIGINAL

THERE WERE ONLY A HANDFUL OF SEMINAL TITLES AT THE DAWN OF VIDEOGAMING AS WE KNOW IT, AND MUD – WITH ITS VAST AND ECLECTIC COMMUNITY OF VIRTUAL WORLDS – WAS ONE SUCH GAME, A CONCEPT EMBEDDED WITHIN THE MMOS WE PLAY TODAY



» There were no in-game maps for MUD games, meaning players would often create their own.

» [PC] *MUD2* drew the attention of modders and a slew of homebrew MUDs followed in its wake.

There's an almost mythical sensation in remembering those earliest of videogame experiences, the same sort of revelation that you might feel when considering something as grand and far removed from our own lives as the birth of humankind. Think about how it might have felt at the moment in time that came with the discovery of fire and perhaps you might summon an almost ethereal sensation, as though we all still have the memory of that spark. As a gamer, those uncountable days before home systems harbours that same feeling; it was a digital frontier, not only because of the newness of it all, but because of how secular and unknown it all was.

Mainframe computers, used in universities, were almost exclusively the only manner in which young programmers could experiment, and the internet was not yet sufficient enough to share the information so readily. Young students and early programmers were each trying to understand just what computing was capable of, and in many cases utilising their shared interest in games – that is, board games – to craft their own experiences from within a computer. "They often talk about the 'hacker culture'," begins Richard Bartle, professor at University of Essex, "where people would be taking things to pieces and putting them together and just trying things out just for fun. But it wasn't that when you came to university and you started to do computing: everyone was like that, so you just fell into it." This 'dawn of videogames' was born from these very people, the sorts willing to explore and invent when there was nothing laid before them.

» [PC] Eventually MUDs would require Telnet clients to connect to the service.

"The early history of *MUD* comes from a friend of mine, Roy Truckshaw, at the University of Essex who was in the year above me," explains Richard, who was also one of the two core 'developers' on *MUD*, though the name was not even close to becoming common parlance at the time. "[Roy] wanted to write some communication system so that people could send messages to each other, basically," explains Richard of how the game came to be. "He applied for the necessary privileges to be able to do this but was turned down ▶

The ways in which MUD has shaped virtual worlds

Exploration
Since the whole concept was built on the concept of a virtual, connected world, the ability to explore in *MUD* was important. This was mostly done with creative writing and not visuals.

Treasure hoarding
One of the two ways to collect points was to 'swamp' your treasure, which essentially meant going to the necessary swamp location and dropping your loot there.

Player versus Player
PVP would later go on to become perhaps the biggest aspect to any MMO, yet while it was controlled to an extent in *MUD* it was still an area that some players were driven by.

Levelling
Reaching the maximum level of 'wiz' – or wizard – was the ultimate goal in *MUD*, an aim that remains the key focus for practically any modern MMO, often with modern players aiming to be the first to reach maximum level.

Dying
There was a saying in *MUD*'s marketing that said, "You haven't lived until you've died in *MUD*." Death, then, was a common part of the experience, which *Rogue* and roguelikes have since adopted in the years since.

Socialising
The social side of *MUD* was integral to its popularity and growth, but there some people who preferred interacting with others over playing the game – and from there a whole branch of MUDs and, later, games grew.

Player-created goals
It would take game designers the longest time to realise the strength of empowering its players with self-created goals, but *MUD* was doing that from the start, freeing players to explore, loot, kill or level up.

In-game events
Weekly events where players would let their hair down became a part of the experience that many would purposefully log in for, a facet that MMOs enhanced with their seasonal and one-off events.

Role-playing
The biggest part of *MUD*, for its developers, was to enrich players with an opportunity to role-play as different people, the anonymity of the internet giving players the chance to experiment with their own personas.

Continuous development
The idea of a MUD being 'finished' is still humorous to many devoted fans still playing and updating their favourite MUDs. It's typical of any modern game to be enhanced over time today, but none have been gradually tweaked over the course of 30-40 years.

Active MUDS you can join right now

DragonRealms

This is certainly the most ambitious of MUDs, allowing intriguing features, like the ability to run your own shop, craft gear and buy a home. It's one of the longest running MUDs – despite releasing as late as 1996 – and has one of the biggest worlds to explore.

Aardwolf MUD

This is currently the most popular and most recommended MUDs and is constantly evolving. One of its most innovative features is the real-time overhead map, which enables users to more effectively find their way around the huge map.

Armageddon

As you might expect from the title, *Armageddon* is set in a post-apocalyptic empty desert with a few sparse towns to wander around. The emphasis here is on role-playing in the hardcore setting, and it continues to have a diehard community.

Achaea

Easily one of the highest-rated MUDs of all time – mostly because of the grand features that it introduced. With 17 classes, it's one of the most expansive. Here, players can lead a city-state, run a mining empire or even become a dragon.

Sindome

On the other scale is *Sindome*, a cyberpunk MUD that takes its influence from a range of sources – books, videogames and films alike. It has one of the more unique settings and is renowned for its friendliness for newcomers and its helpful staff.

» [PC] *Habitat* by LucasArts was released for PC, as well as the Commodore 64, Mac and FM Towns Marty.

on the basis that the interprocess communication facility was a finite resource. There was only ever 512 blocks that could be sent, and if he made a problem and he used a lot of it up, the rest of the mainframe wouldn't be able to proceed – it would cause a crash. So he was looking for other ways of doing that, and he came across shared memory." This technique, we're told, involved utilising the higher segment of the DECSystem 10's memory that was ordinarily unavailable. What this meant was that any users accessing the higher segment could see changes as they happened, allowing for the sending of messages and paving the way for a totally different kind of social interaction.

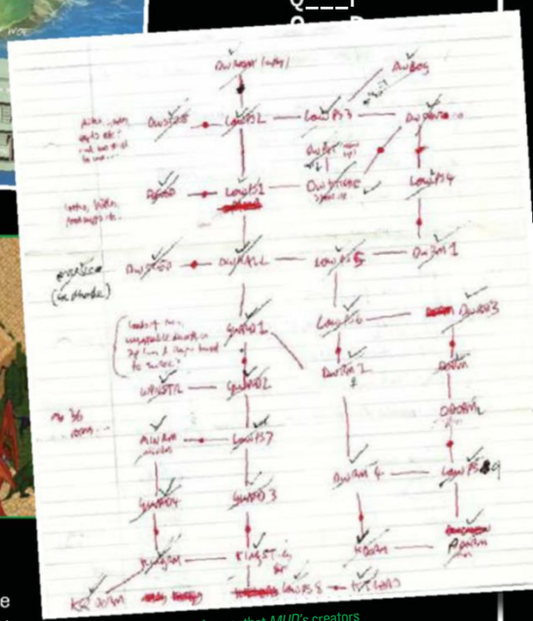
"Roy had played *Advent*, which is the name we called *Adventure* or *Colossal Cave*," says Richard, "but that wasn't an inspiration for it at all." It is a common misconception that *MUD* – and by extension the games that followed – was inspired by Will Crowther's seminal text adventure,

» [PC] *Sindome*, a cyberpunk MUD, was more heavy on text, in order to give players a more descriptive sense of the world.

simply by virtue of the title coming first. But that wasn't the case here, "He wanted to create a world," says Richard, who admits that it was mostly the interface of *Colossal Cave* that had inspired Roy. "He liked the idea of a virtual world, and with this new technique he had discovered – well, new to us – he opened doors and with it was able to create a shared world." This would be the defining aspect of *MUD* – its name, even, formed by an unromantic need to explain its function rather than its entertainment value. "Roy wanted to get across the idea of what it was he was doing," recalls Richard of the game's name, "it was multi-user so it was '*MU*' for a start. There was a version of the game called *Zork* doing the rounds, which on the DECSystem-10 was called *DUNGEN*, without an 'O' because we were only allowed six letters in our file names. So he was saying, 'Well, in order to get an idea of what the game was, it is like a multi-user version of the game *Zork*.' It's often been reported that it was based on *Dungeons & Dragons*, but that's not true. Roy had never played *D&D*." The focus was never to replicate these games, however, and simply provide a twist on what was already there. *MUD* may have owed some aspect of its interface to *Colossal Cave* and was utilising the style of game seen in *Zork*, but that was just a loose connection, a means to an end. For Roy and Richard, *MUD* was all about that multi-user, online experience.

Roy's work had only lasted a week before he and Richard met in 1978, the two hitting it off quickly. Both had come from poorer regions of the UK and had managed to get to university,

» This colour poster was handed out as part of the *MUD2* starter kit, and depicted 'The Land' from *MUD1*.



» One of the many sheets of paper that *MUD*'s creators needed just to keep track of the game world.

"I PLAYED D&D AND KNEW QUITE A BIT ABOUT ROLE-PLAY"

Richard Bartle

and both had a desire to create a virtual world that could be viewed as an improvement on our own. "I'd already written some games, I played *D&D* and knew quite a bit about role-play," says Richard, explaining that from this prior week of work Roy had already created two versions of *MUD*. "The first version took him about two hours and that was to test the tech. The second was the main one, and that took about a year. This was written in assembly language, and the part of the way that the game worked was when you wanted to add content – what is now called content, anyway, we didn't have a word for it back then – it was done from within the game. He gave a number of us – I mean, maybe three – the ability to write and create objects within this world. I was one of them, and the reason I was one of them was because I was good at it. I had created things for games before, and so it was second nature to me."

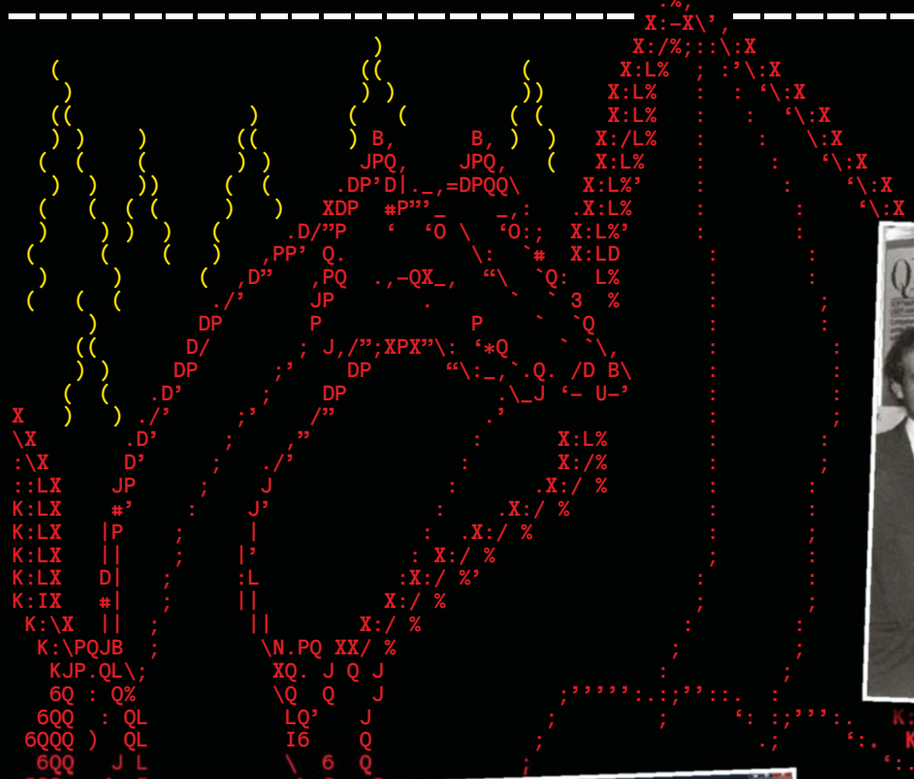
Anyone else might have focused solely on the gameplay, emphasising the role-playing elements or ensuring a core arc to the story. But while these were undoubtedly important aspects to the game, both Roy and Richard cared more about creating a virtual world. "This is why Roy and I got along so well," says Richard. "Neither of us are from great backgrounds, I come from a remote coastal town on the east of Yorkshire: down south in Essex it sounded like I was a farmer. Roy comes from Wolverhampton, he sounds like he should be working in a factory. But we were both smart, if we hadn't have been we would never have got to university." Richard adds that the British class system in particular had always remained an issue for the pair of them, where a lot of your life was decided the moment you're born. The virtual world of *MUD* wasn't intended solely for entertainment, it was going to be for an escape and an opportunity for self-discovery. "We didn't like how the real world judged people, we wanted people to be judged by effectively the strength of their character, who they really were rather than what the world decided they were. We wanted to make a better world, so we did."

Richard would go on to later publish a number of articles and books regarding the matter of game

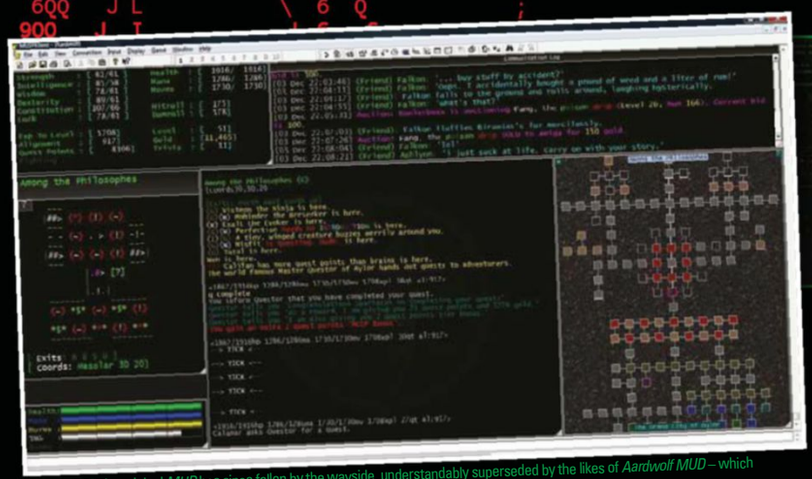
» [PC] By 1997, *Ultima Online* was proof enough the text-based nature of MUDs were behind us.

design, even so much as defining the four core pillars that any player might fall under: killers, achievers, explorers and socialisers. Though he hadn't conceived the concept at this time, these elements were still present in the design of *MUD* all the same, which affected many of the systems that were implemented. "There's a number of factors that come close together here," says Richard, using the idea of levelling your character up as an example. "People playing games need goals and levels. I knew from *Dungeons & Dragons* that these were a good way of giving players goals. And that's a satisfactory answer in itself, levels did serve that function. But levels aren't the *only* way to serve that function, and there are other ways I considered doing it." Richard added that he had considered myriad options for implementing both goals and levels, whether that was a points system without tiered levels, or using a gear-based system. There was even talk of a democratic system, whereby players could vote for leaders – but, in fact, the gameplay of *MUD* was far more political than even that idea. "Levels were a rebellion against the British class system," says Richard, "because if you're born at level one and you can never get out of level one, that's pretty bad. And we were pretty much born at level one or level two, I suppose. The moment I was born was the moment that I wouldn't become a High Court judge. Ever. Just from my background. With *MUDs*, what we let people do was to see their progress and their status relative to other people, essentially to show everybody that you've all got it within you to be *somebody*."

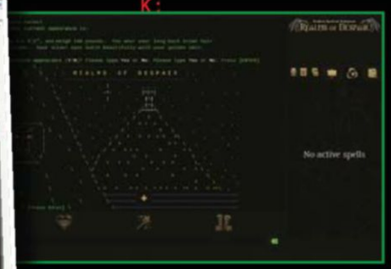
Whether players knew that or not, this world touched onto something that people wanted. Those



» Becoming 'wiz' – or max level – was a considerable achievement, and here are a few of MUD's earliest wizzes.



» [PC] The original *MUD* has since fallen by the wayside, understandably superseded by the likes of *Aardwolf MUD* – which includes a massive world, deep game systems and player-assisting features, like a map.



» [PC] *Realms Of Despair* used the SMAUG engine and was released in 1994.

▶ interested were able to follow their own story, create the characters that they wanted to be and explore themselves via the game, alongside other players doing exactly the same. But this second version of *MUD* wasn't the one that took off, it was being shared freely, as was typical of games at the time, but it still had its limitations. "Writing things in assembly language is a slow process, so after about a year Roy got frustrated. We ran out of memory anyway because the tools to add content were embedded in the game and that took up memory space. So what he wanted to do was move that out of the game and to do it offline and then created a programming language for designing 'MUDs', as we were now calling them. So he did that and we ended up with the third version of *MUD*, but it became known as *MUD1*." The reason for this weird numerical confusion was simple: the streamlined nature of the new version meant that Roy and Richard could produce a richer world, and that became more compelling to players. Though it was the third version, it was at this point that the game – and with it the genre – began to really spread under the simple moniker of 'MUD'. "Historically what happened was that people played this game over dial-up, they liked it and some of them wrote their own games." This was the nature of MUDs, their impact having such a strong connection with its players, the majority of who were also like-minded programmers. "Some of those games weren't very good," adds Richard, "some of those games were very good. Some of them weren't good but they were played a lot. These games inspired other people to try to make their own. And so on. So there was like an evolution here as people were inspired by these games to make their own."

» [PC] Nowadays some MUDs run from within a browser, and include a number of enhancement features.

What happened was a growth of the 'genre', though it hardly seems apt to call it such. *MUD* was the name of this particular game, but the same moniker was then applied to countless others as they took the game in a direction that they felt was better, more suited to their style. This was where *MUD1* earned its number, a sort of first prize ribbon that denoted it as the original from which all others were born. Over the course of the Eighties, *MUD* continued to grow and grow, drawing in thousands of players keen to, at the very least, try this virtual world. By the start of the Nineties, countless variations on the *MUD* formula had been released; Richard believes that around 100,000 people had played a MUD in one form or another. "Just before the advent of the world wide web, MUDs took up about 11 per cent of the internet's bits," says Richard. "That's the status that they had. There wouldn't have been many people on what would become the internet that wouldn't have tried them at some point, just logged in to see what the fuss was about."

Roy and Richard would continue to work on *MUD1* for a few more years, before becoming restricted by the system and feeling the need for a rewrite, implementing even greater depth to the game's world. "The thing was, because the world didn't have enough critical mass of activity," recalls Richard, "we couldn't get the interactivity that we wanted to. It never got snowballed. So when it came to the rewrite, I persuaded Roy that we should make *MUD* into more of a game." *MUD2* –was released in 1985, and would go on to become the benchmark that all other MUDs would later follow. It utilised the same core concepts that they wanted with their virtual world but with greater levels of interactions, and sparked a passionate fanbase that lives on to this day.

"I think it was a guy named Jim Aspnes, he wrote *TinyMUD* [in 1989]," says Richard of how MUDs began to shift. "This was *MUD* with all the gameplay taken out, basically. That spawned several other of these 'social worlds', MOOs. The most famous of which was *LambdaMOO* and that was the *Second Life* of its day. There was also *MUCK*, and then there were MUSHs, which were retrofitted to mean Multi-User Shared Hallucinations. So we had these MOOs, MUSHs and MUCKs and they were all used for various role-playing or real-world style applications."

This was the social branch of *MUD* and they, too, began taking

"EVERQUEST WAS PRETTY MUCH DIKUMUD WITH A GRAPHICS ENGINE"

Richard Bartle

» [PC] *World Of Warcraft* may have made the MMO popular, but a lot of its systems came from MUDs.

on a life of their own. The same happened for those that favoured combat as well, with *AberMUD* – named because it came from the University Of Aberystwyth – being released in 1987 before ultimately branching off to America where it really started to take off. It would become a booming industry, growing and evolving throughout the Eighties and early Nineties with a plethora of alternatives. Some players would host their own MUDs, creating their own separate communities. Others would program their own versions, in this way creating spin-offs. Some of these would focus on the social aspect, others on combat or exploration. The range was broad, and offered something for every taste, a facet that could even be tied into Richard's taxonomy of player types that he would detail in a thesis paper in 1996.

But it was the Danish that would go on to have the biggest impact on the concept of the MUDs with *DikuMUD*, delivered in 1990 and named after the branch of Copenhagen University that birthed it, Datalogisk Institut Københavns Universitet. The heritage was clearly there, but *D&D* had a big hand in it too and, as such, had a much bigger emphasis on combat as a result. "They fully explored all the concepts that we'd had in the earlier games," says Richard of the design of *DikuMUD*, "took some of them further, dropped some of the others and they formed the basis for MMOs." This focus on combat grabbed a large audience and, from there, the concept would continue to evolve with developers of the Nineties using *DikuMUD* as their inspiration. As computer hardware became more sophisticated, it was clear that the next step was to move beyond text-based gaming to the inevitable. "We knew that there were going to be graphics, but we didn't have graphics," admits Richard. "Trying to do graphics on a Teletype with paper, well no, you can't do that. But we had ideas for it."

But the biggest surprise is perhaps to learn that MUDs can be played today. There are few games that can claim such a prestige, but the real honour lies in the underlying design of the game, a thread of which can be traced right back to those earlier dark ages of computing. Graphical MUDs, for example, was a term well known from as early as 1986 with Lucasfilms's release of *Habitat*. While they would all expand on from this, it wasn't until the likes of *Ultima Online* (1997) and *EverQuest* (1999) that the next phase in MUDs would be realised. They had sought to distinguish themselves apart from their inspirations but the heritage was there. "All the major principles involved in *Ultima Online* came from a MUD background," says Richard. "*EverQuest* was pretty much *DikuMUD* with a graphics engine. It is a direct line straight down through *DikuMUD*, through *AberMUD* and straight to *MUD*. Likewise *World Of Warcraft* from there." Once *WOW* had set the tone for what was expected from an MMO, everything else since has followed suit. *MUD*'s heritage continues to live on, not only in the running of those original games, but in every new virtual world that is released. That's quite a legacy for a 40-plus year old text adventure.

» [PC] Many popular fantasy and sci-fi franchises were converted unofficially into MUDs, such as *Discworld* here.

The distinct forms of MUDs that evolved from the original

Hack-and-slash

While not really akin to the hack-and-slash genre that we recognise today, hack-and-slash MUDs are titles that focus on combat above anything else. The combat itself is commonly similar to *D&D*, though it is naturally implemented in a variety of ways across the spectrum of MUDs.

PK MUD

If hack-and-slash is player versus environment, then this is the binary opposite to that. Fewer MUDs allowed for PVP – known as player killing, or 'PK' – but those that did would commonly built up a fanbase. Even fewer games allowed player-killing as the only form of combat, and these titles were known as 'Pure PK'.

Graphical

Due to the limitations of the technology at the time, graphical MUDs are the smallest of the varied categories. Beginning with *Habitat* in 1985, the term wasn't properly used until the likes of *Ultima Online*, *EverQuest* and *RuneScape* made an appearance, at which point it quickly dropped out of use in favour of the more commonly recognised MMORPG.

Role-playing

As you might expect, RP MUDs are favoured by those looking to get into their character. The genre and style of the game typically affects the types of characters that can be created, and some games emphasise role-play over combat while others combine the two together. To this day it remains an important aspect of virtual worlds, with almost any major MMO launching with role-play-exclusive servers.

Social

This branch of MUDs really puts the gameplay to the background to allow for an environment more suited to interacting with people. It was this range of MUDs that then went on to spawn new terms like MOOs, MUXs and MUSHs, each with their distinct variants. The biggest point of social MUDs was to allow users to create content and share, akin to *Second Life*.

Talker

As an even more specific version of a social MUD, the concept of the 'Talker' shows just how innovative *MUD* was at the time. Talkers stripped away all of the gameplay of *MUD* and only leveraged the chat system. Nowadays we'd simply call them chat rooms, but back then there weren't common tools in place for such communication and this was how players of MUDs retrofit their games to allow for it.

Educational

Taking the constructional nature of MUDs – whereby much of their content can be created by any user with the right privileges – and in doing can be used well to teach. A handful of universities and students utilised the code base of varying MUDs for this very purpose, allowing students to learn coding by trying it themselves.

» [PC] *Everquest* was absolutely massive on its release and received countless expansions.

Commodore 64 fact

■ The SX-64, a portable variant of the Commodore 64 featuring an integrated floppy disk drive and five-inch CRT monitor, was the world's first full-colour portable computer.

PROCESSOR: MOS TECHNOLOGY 6510 8-BIT CPU (1.023 MHZ NTSC/0.985MHZ PAL)

RAM: 64KB MAIN MEMORY

GRAPHICS: VIC-II, 320X200 DISPLAY, 16 COLOURS, EIGHT HARDWARE SPRITES (24X21 PIXELS)

AUDIO: SID SOUND CHIP, THREE CHANNELS WITH FOUR WAVEFORMS PER CHANNEL AND A MULTI-MODE FILTER

MEDIA: ROM CARTRIDGE, 5 1/4-INCH FLOPPY DISK (OPTIONAL), CASSETTE TAPE (OPTIONAL)

Commodore 64

» **MANUFACTURER:** Commodore » **YEAR:** 1982 » **COST:** £345 (launch), £40+ (today)

It's fair to say that the Commodore 64 was not a design revolution. The machine almost directly reused the case design of its predecessor, the popular VIC-20, with only a new colour scheme and minor changes to accommodate new connectors. Under the hood, it was a different story – the VIC-II graphics chip and the SID sound chip were a significant step up from what had gone before, and had been specifically designed for gaming use in the ill-fated Commodore MAX Machine. Thanks to Commodore's ownership of chip fabricator MOS Technology, production costs were low enough that the machine could significantly undercut most competitors, and even profitably survive a price war. As a result, the Commodore 64 became the world's best-selling computer for much of the Eighties.

The popularity of the Commodore 64 ensured that it lived on for many years after the 8-bit computer market started to decline. The iconic breadbin design was replaced in early 1987, with the more modern C64c based on the design of the new Commodore 128. The system was repackaged as a cartridge-based games console in 1990, but consumers rejected it in favour of the computer's full feature set and cheaper tape-based games. Still, the Commodore 64 continued to sell profitably until the demise of Commodore itself in 1994 – which came shortly after the company had announced that it was to finally discontinue the computer.

EDITOR'S CHOICE Last Ninja 2

This is the pinnacle of System 3's shuriken-slinging series, and though versions of the game appeared on other formats, the C64 was always its true home. The game squeezes an awful lot of commands into its one-buttoned joystick controls, allowing for rich adventure gameplay. The isometric graphics are detailed, well animated and make excellent use of the Commodore 64's colour palette, while Matt Gray's excellent SID soundtrack stands the test of time. While later games ultimately pushed the humble 8-bit technology further, few could match *Last Ninja 2*'s achievements during the machine's years in the commercial spotlight.

The History of Championship & Football MANAGER

AFTER 25 YEARS' WORTH OF GAMES, TAKING ITS CREATORS FROM NON-LEAGUE MINNOWS TO WORLD CONQUERORS, IAN DRANSFIELD SPEAKS TO THE CREATORS OF CHAMPIONSHIP/FOOTBALL MANAGER TO FIND OUT HOW THEY MURDERED OUR FREE TIME

The series once known as *Championship Manager*, now *Football Manager*, turned 25 years old in 2017 – but its story begins further back than that: in 1985. Two brothers, Paul and Oliver 'Ov' Collyer, decided to try and make their own game of soccer management from their Shropshire home. "We were playing the other games – *League Division One*, *Mexico '86*, the sort of international version of it, and *Football Manager*," Ov explains. "[We were] checking out all the other games of the time, and deciding we didn't like them very much so, in our arrogance, deciding that we might be able to do it better."

This ambition took time to bloom, however, with the original *Championship Manager* being worked on here and there for six years before it was finished in 1991, and released in 1992 for Amiga, Atari ST and, shortly afterwards, PC. A big reason why it took so long was that… well, Paul and Ov were in school and college, literally bedroom-coding the game. "There were times when maybe six months would go by when we didn't do anything on it," Ov explains. "The other side of it was when we'd spend our holidays locked in the attic just trying to make it better."

And better things got – as the project took shape, the brothers starting hawking their wares to publishers around Britain, trying to get their new take on an established genre noticed. There were knockbacks, of course, with Electronic Arts turning *Championship Manager* down for not featuring enough 'live action'."The 'no graphics' thing was a big thing," Ov says of another publisher's feedback. "I remember 'bolt some graphics on there' was the exact phrase used." But one company expressed an interest, and Paul and Ov put their game in front of publishing house Domark. The rest, as they say, is a funny old game – and a slow, drawn out slide into professionalism.

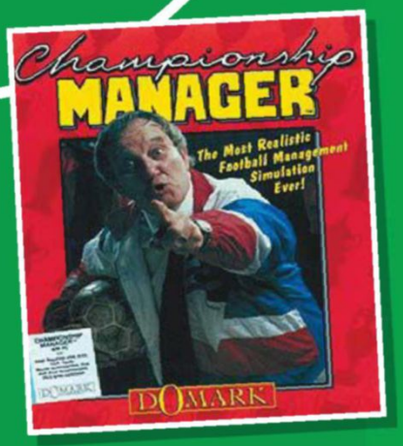
The original *Championship Manager* might have been the beginning of a series with seemingly eternal appeal, but as a game it's all but forgotten – immediately trumped by *CM '93* bringing with it real player names, and that's where the hardcore football fans started to take notice. While, at the same time, critics started to miss the point.

"The good reviews made us happy – the shit reviews made us miserable," Ov laughs. "It was kind of depressing to read something really bad – you'd feel angry because we knew people were enjoying the game. But I guess we did have some really good

» [PC] There's a lot to be said for using ridiculous formations, even to this day, but the 1-4-5 overload from *Championship Manager '93* is our favourite.

» [PC] The 2D match engine arrived with *CM4*, offering more specific feedback on your players and how they were performing.

» [PC] Notts County, Charlton, Torquay and the mighty Barnet in the Premier League – playing a long game of *Championship Manager* is one of life's great joys.



supporters in the computer press. *PC Zone* got on board with it, I remember. We had our supporters, and we had others who just didn't get it at all." Even without the unanimous backing of the early Nineties gaming media, though, *Championship Manager* sold well enough that a sequel was on the cards – at least after a detour to the continent.

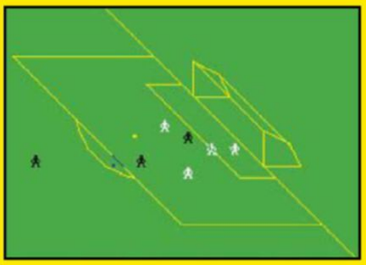
"Italian football was the main league people were watching, I think because of Channel 4's coverage started around then," Paul Collyer explains of the brothers' decision to make *Championship Manager* Italia – a continental-themed update to the *CM '93* formula. "I guess we just thought people wanted to play an Italian version, with the leagues in it and so forth," Ov adds.

But it wasn't as straightforward as it might seem, with Domark not actually on board with the decision to make the Italian league version of *Championship Manager*: "We took it to Domark and they didn't want to do it," Ov says. "So we ended up sort of half-publishing it ourselves, in the end they got on board and carried it on." A move no established dev team would make with its publisher these days, of course, but back then it was two brothers who didn't even have an office.

Italia performed well enough, but work on a sequel proper was commencing – and ambitions had grown off the back of a few years' success in the lower leagues. And so, late in 1995 the ambitious, processor-and-RAM-hungry *Championship Manager 2* hit and took the world by storm. The original might have opened some eyes, but *Championship Manager 2* brought tears to them with its incredible depth, realistic portrayal of the trials and tribulations of management ▶

The Other Dugout

The story of the original Football Manager-manager



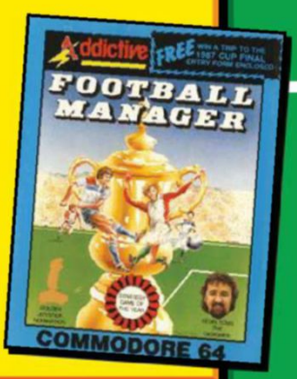
» [ZX Spectrum] Kevin Toms is currently working on a book, telling the story of his *Football Manager*'s creation.

***Football Manager* wasn't the first to bear the iconic moniker, with Kevin Toms creating the *original* football management game over three decades ago.** Created in the space of a year, Kevin Toms' *Football Manager* released in 1982 initially for the Tandy TRS-80, with ports following on ZX80/ZX81. This text-only version did indeed have some graphics 'bolted on' for its port to the Spectrum, and subsequently made its way to every home computer of note in the Eighties.

The game featured an engrossing – though light – simulation of the management game, unlike anything else that had existed prior. It also included – across the original and subsequent releases – features it would take neo-*Football Manager* years to implement, like a graphical match engine and team talks.

While *Football Manager* dominated the Eighties, with a well-received sequel and *World Cup Edition* following, the series dwindled in its third – Toms-less – edition and fell out of favour. In a sign of things to come for what would become *Football Manager*, Toms cited 'artistic differences' as the reason for his lack of involvement.

Toms returned to the series he created with *Football * Manager* (the star is important); a tweaked version of the original game for iOS, Android and other modern systems. The legend – and the beard – will never die.



It's In The Game

Five CM/FM legends who did well in the real world

ANDRÉS INIESTA

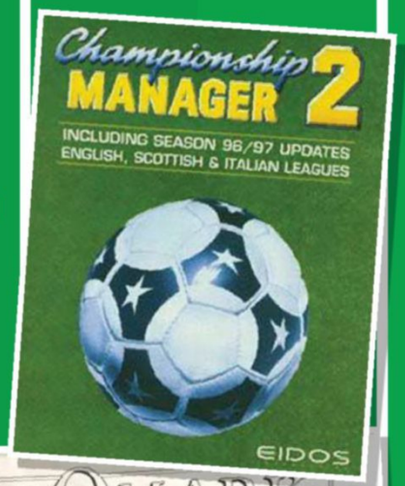
■ It's misremembered that Lionel Messi was the youth prodigy *CM 01/02* got right – it was actually then-17-year-old Andres Iniesta, who's still a world-beater at Barcelona.

IGOR AKINFEEV

■ While he's never left CSKA Moscow, *Football Manager 2005*'s best teenage goalkeeper has seen a monumental success in his native home of Russia.

DANNY MURPHY

■ Murphy was one of *Championship Manager*'s earliest solid predictions with the Crewe reserve a fine signing in *CM2*. In the real world, he was a solid, reliable Premier League midfielder.



DOMARK
16 July 1991
Paul and Oliver Collyer
Alfost Mill
Church Stretton
Shropshire SY6 6RL
Dear Paul and Oliver
European Champions
I just thought I'd write you a note to confirm Friday's chat. We'd like to develop and publish the game, but we will not be ready to sign a full contract for a couple of months. In the meantime, therefore, I'd like to pay you £250 to take an option on the game for 6 months; in other words I pay you £250 now on the understanding that Domark have first right to publish the game.
To give you an idea of the sort of financial arrangement we would offer when we actually get moving, here are 3 options:-
1. We pay you a flat fee of £10,000 for the game as it stands and for your help in continuing to develop it up to the time of release.
2. We pay you an advance of £2500 against a royalty of 7.1/2% of our income from sales of the game. This is about 71p per copy of the game after we sell enough copies to pay off the advance.
3. We pay you no advance, but you get a royalty of 10% of our income from sales of the game. This is about 95p per copy.
As I'm sure you can see, the first option is the safest, but your income is not related to the success of the game. The second and third options are increasingly speculative, but potentially much more rewarding if the game sells well.

» Domark, original publisher of *Championship Manager* (working title *European Champions*), was straightforward and forthright in its offer to the brothers.

and – for the first time – players with abilities 'scouted' by the Collyers' studio, Sports Interactive, without just using a book of stats (we'll get back to that).

An early casualty thanks to the improvements in *Championship Manager 2* was the Atari ST and – surprisingly, for the time – Amiga. "The Amiga and ST were the machines at the time," Ov admits. "For us to turn around and say, 'We've just written a sequel and it doesn't work on the same platforms as the first one,' it's a little bit controversial. We had tried to do it on the Amiga and realised we couldn't, the spec wasn't sufficient to handle the game. So we said, 'We can't do this and we don't think it's a good idea.'" Two years later a truly terrible port of *CM2* for the Amiga 1200 did release, but that was nothing to do with Sports Interactive or the Collyers. The brothers agree it should never have been released, but let's not dwell on that particular heartbreak, shall we?

For you see, *CM2* (and its two expansions, for the 96/97 and 97/98 seasons) didn't just raise the bar – it ripped it out and flung it over a rainbow. The confidence of the young, growing SI team was bolstered by the fact those making it were having fun and – in a slightly surprising revelation – because *Doom* was on tap in the single room of the house share in which the game was being made. "*Doom* was trying to put paid to our work on *CM2*," Ov laughs. "That was exactly the time of *Doom* – it was a brilliant release. When you were working on the game and you needed a break, you'd just get *Doom* loaded up and it was completely the opposite… almost."

» [PC] It's not just the players *CM* has been known to predict accurately – managerial careers sometimes follow eerily similar paths to real life.

That help was needed thanks to the newfound pressure on the team. This was no longer a new product – it was an established series with numerous releases under its belt. "It wasn't like when we first wrote it in Shropshire when it was just a bit of fun for us," Ov says. "This was something we knew people liked, so we had the situation where we had a little bit of pressure and a little bit of expectation." Said pressure and expectation merely spurred SI on, along with the confidence the brothers had that they knew what they were doing, the two brothers working together and some friends helping source and input the game's reams of data.

By this point the complexity of the real-world game had increased, so it wasn't just a case of fitting in more real players and formations – *CM2* had to include rule changes. One big change in the mid-Nineties was the Bosman ruling, so named after Jean-Marc Bosman and his successful legal case allowing him to move clubs for no fee when his contract had expired. Including a complex ruling like this, even with the relatively amateur setup the Collyers still had, was never in doubt: *Championship Manager* was always about accuracy. And it's always been about building a world around this realism.

"The thing that Ov said, and it's always stuck with me," Miles Jacobson, studio director at Sports Interactive, interjects, "was that they were trying to create a football universe. Everyone else was creating a football game, and it might reset at the end of every year so it didn't matter, it didn't

VINCENT KOMPANY

■ That kid from Anderlecht who you'd always buy for not very much and would get 15 years out of? He ended up the 23rd best player in the world – according to *The Guardian*.

KIM KÄLLSTRÖM

■ Not as successful as in the game, Källström regardless forged himself a career as a dependable workhorse of a player with multiple league and cup wins under his belt.

» [PC] Some may think this is an intensely dull screen, while others have just had a powerful nostalgia attack.

> **"When you were working on the game and you needed a break, you'd just get Doom loaded up"**
> Oliver Collyer

really interact with other teams, they didn't really have players apart from [a basic] transfer market which would come through once a week when you'd be offered one player. But he said they didn't care whether a human was playing or a computer manager was playing – the game would carry on because it would be a living, breathing world. That's what we've always tried to do ever since then."

Something very few would have predicted over the lifetime of *Championship* (and *Football*) *Manager* was just how influential the game series would become in the real world, thanks in no small part to the breathing world Sports Interactive created. We've all heard stories from other sports games where an athlete commented on their in-game stats, or seen a game take the bold step of having accurate kits, stadia and player faces in it – but the balance swiftly changed the other way when it came to *Championship Manager*, thanks to one key element: data.

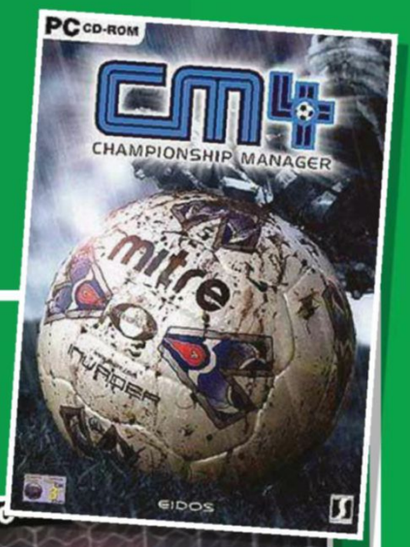
Thanks to the power of crowdsourced information, *Championship Manager* was able to establish a footing in the realm of real-world player scouting early on, after having relied on information in the Rothmans Yearbook for the first couple of releases. Around *CM2* the team began contacting fanzine writers for specific clubs and getting information from them on their teams, the players and who to watch out for in the future. It wasn't always reliable, but it offered a much more genuine representation of teams and their players – especially in the lower leagues. Asking for direction from a local is always the way to go with specialised knowledge, and Sports Ineractive built on this with each iteration.

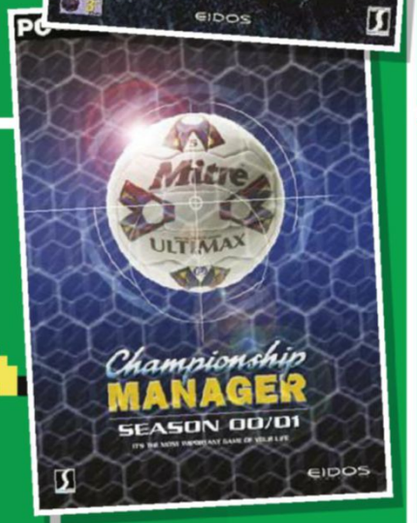
These days you're looking at a scouting network comprising of thousands of individuals looking at around 2,200 clubs in 51 countries, along with an additional 2,000 or so lower league clubs covered in less detail. It is, without a shadow of a doubt, the largest single player scouting network in any sport in the entire world, and it's all to make sure the data in a computer game is as accurate as it can be. So is it any surprise teams started knocking on SI's doors, with Premier League club Everton officially licensing *Football Manager*'s database back in 2008?

There'd been a build towards this embracing of the series by the footballing establishment, with anecdotal tales popping up all around of players offering their coaches advice on little-known opposition players by showing them said players in-game, lower league managers using *Championship Manager* as a £30 worldwide scouting tool to discover potential new playing talent – or even former Tottenham Hotspur manager Andre Villas-Boas, whose self-confessed love for *Championship* and *Football Manager* contributed directly to his role as chief scout at Chelsea. By no means were these people using the game as a stand-in for reality, but its accuracy and utility hasn't been in doubt for the last decade-and-a-half. *Football Manager* is a game, but *Football Manager* is also a tool for the professionals.

At the same time, *Championship Manager* was becoming more of a game made *by* professionals – increasing sales and exposure meant more revenue, while changes at Domark (now Eidos following a merger) were pushing everything towards a more traditional publisher-developer relationship for *CM3*. "We were more of a serious operation," Paul explains. "I remember people staying up for three days because we were about to submit the finished version of *CM3*."

So maybe not *that* serious yet, then. "We had a competition to see who could stay





▶ up the longest," Miles laughs. "Thankfully, I wasn't programming at the time, because I was hallucinating dinosaurs." One thing that certainly stayed the same was the team's love of the first-person shooters of the day – and for *CM3* it was *Duke Nukem 3D* taking up more time than it maybe should have. "When you talk about *CM3*, I think of *Duke Nukem*," Ov says. "I visualise a darkened office with everybody peering into their screens, sound coming out of their little speakers and explosions ringing out of the whole office. It was the perfect way to relax after half an hour of coding. Then six hours of *Duke Nukem*, followed by a phonecall to explain why the game's late."

But the hard work was present for all to see with *CM3*, it was refined for the *00/01* update, but when *Championship Manager 01/02* hit, something big was triggered. The game has gone down in legend and is still played to this day ("By a lot less people than you imagine," according to Miles), with players still sharing their stories online and reliving the tale of bagging Tonton Zola Moukoko for a hundred grand.

"It's a great game, something we're all very proud of," Miles says. "It's probably what *CM3* should have been in the first place – I think less *Duke Nukem* was played that year." A big reason why there was more polish was down to Miles' move from general helper and friend of the Collyers to being asked to run the business side of the operation, with neither of the brothers wanting to get their hands dirty on that side of the ever-professionalising fence.

> **"I wasn't programming at the time, because I was hallucinating dinosaurs"**
> Miles Jacobson

Miles' impact was immediate. "Rather than letting money just sit there in a bank account I was suggesting weird things like, 'Why don't we hire more programmers?'" he explains. "So there was a bit of a hiring push at that point – a lot of those people are still with the studio now – we also added a QA team for *01/02* – all the QA had been done before [externally]. It was still a lot of fun, but there was more work getting done."

"*CM2* was still based on bedroom code," Paul adds. "So it was *CM3* [and the updates] that were literally done in the studio, writing code, in a more professional manner. It really mattered if things were late or not – it always mattered – but it mattered more. *CM3* definitely was a sea change in terms of the studio's approach, absolutely."

That change didn't mean everything would remain rosy, however, as an increasingly tense relationship with Eidos and the stresses of having worked on a single series for over a decade began to take their toll. "We totally overreached ourselves," Paul admits of the fiasco that was *Championship Manager 4*. Released in 2003 it promised a huge overhaul of the *CM* formula, introducing a 2D match engine for the first time and met with a fevered response from the buying public on its release. That fervour soon turned to anger as players realised how buggy and clearly unfinished the game was.

» [PC] *FM 2009* saw the next evolution for the match engine, with 3D now the preferred presentation.

It's Rather Lame

And five players who didn't quite live up to the in-game expectations

TÓ MADEIRA

■ The main issue with Madeira's real-life situation was that... well, he wasn't real. A fake player introduced by one of SI's scouts, this *CM 01/02* legend was promptly patched out.

TONTON ZOLA MOUKOKO

■ He was so great people actually talk to the man in real life about his *Championship Manager* career. Sadly, Moukoko in the physical world failed to live up to expectations.

TOMMY SVINDAL LARSEN

■ One of the best signings on *Campionship Manager 97/98* saw out most of his years in Norway, never doing anything particularly spectacular. We'll always have the in-game memories, though.

» Sports Interactive has grown hugely – though in a controlled fashion – over the decades, from two to over 100 employees.

We learned a lot from *Championship Manager 4*," Miles explains. "We learned that if we're going to be really ambitious with our games and hire loads of people, we actually had to have a structure as a business." With Miles notionally working as a producer "not having a clue what I was doing", the team was too close – blinded to the fact that *CM4* was not a good game at launch. "We were also blinded by the fact that at that point journalism wasn't as honest as it is now," Miles adds. "There were some reviews that came in for *CM4*, we'd had 10/10 reviews because people had been told that all the bugs they were finding *three days before release* were all going to be fixed in the final version of the game."

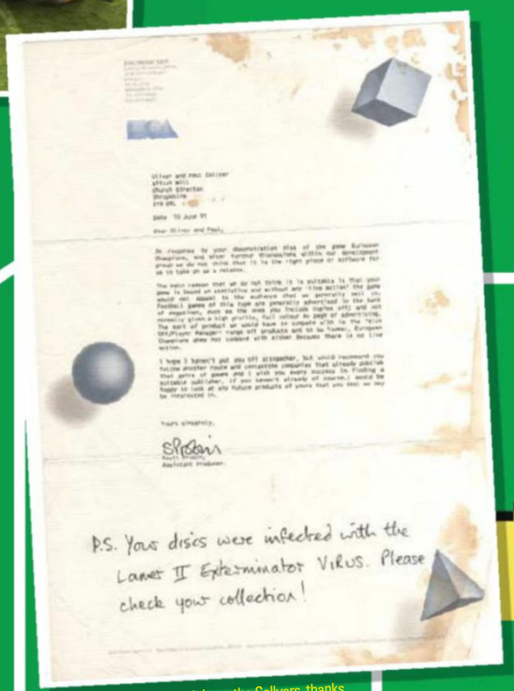
Paul remembers the slip-up with optimism, though. "Despite the fact it was a shit game and people bought it thinking it wasn't going to be, it did benefit the studio and the future games," he explains. "Sometimes you have to go through something difficult to be able to do something better in the future. I think we've grown in a more sustainable way. And we have structure."

The problems of working with a publisher Sports Interactive wasn't getting along with were clear to anyone working at the office, and by the time *CM4* hit the shelves it had already been announced it would be the studio's last game with the publisher. "It's pretty difficult when you're making the most in-depth, complicated football management simulation that has ever been attempted with *Championship Manager 4*," Miles remembers. "And there are issues with your publisher as well. It made it a very difficult period. I tried to protect everyone from the issues, but it was clear that there were problems there.

"Mainly because they'd set up a studio called Beautiful Game Studios that they were claimed were doing a platform game."

But it wasn't quite the end of the working relationship, with redemption in the form of *CM 03/04* coming as a result of Eidos needing to fill a gap opened in its release schedule. "We got rid of a bunch of issues by doing *CM 03/04*," Miles says. "That was the game *CM4* should have been." But even with redemption for the team and its series, there was no going back on the move from under Eidos – and with the move came one of gaming's most notorious splits.

"We were really excited about it," Paul laughs, as Miles points out it was a mutual decision. "But a bit nervous," Ov interjects. "It was a contest to show which was important: was it the



» One publisher that turned down the Collyers, thanks to their game not having enough 'live action', was Electronic Arts. It's still done okay for itself, mind.

FREDDY ADU

■ *Football Manager*'s first true wonderkid, Freddy Adu had all the hype in the world behind him. In reality, he consistently failed to live up to the hype.

CHERNO SAMBA

■ Ah, Samba. A *Championship Manager* legend, hyped to the rafters and back again. And his real-life playing career? Not much happened, then he retired. A shame all round.

Conversion Capers

How the series expanded beyond the keyboard

CHAMPIONSHIP MANAGER 2

AMIGA

■ One of gaming's most ill-fated conversions, *Championship Manager 2* was not meant for the Amiga. It required 8MB RAM minimum to run on the PC, and the A1200 had a paltry 2MB as standard. A cut-back version was made to run on Commodore's machine (not by Sports Interactive), and it managed to score a miserable 12% in *Amiga Format*.

CHAMPIONSHIP MANAGER 01/02 & 02/03

XBOX

■ *Championship Manager*'s first foray into the console market is surprisingly competent – well, so much that an Xbox-only update was released for the 2002/03 football season. While it didn't change the studio's approach to the series as a whole, it did help open things up for more ports in subsequent years.

FOOTBALL MANAGER 2006-2008

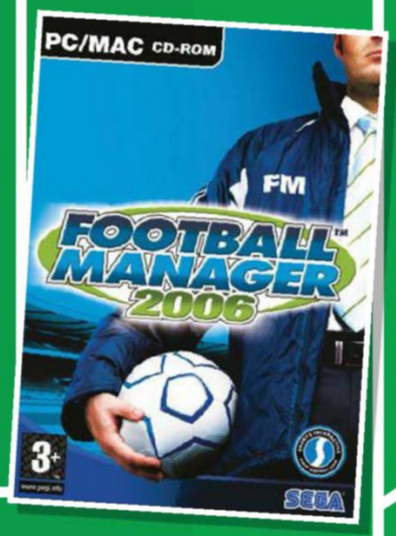
XBOX 360

■ A few years after the original Xbox got *Championship Manager*, Microsoft's next console bagged a few versions of the rechristened *Football Manager*. Each version was almost on a par with the PC data-wise, and console-specific controls were well implemented. However, this was the final console release for the series.

FOOTBALL MANAGER 2006-2013

PSP

■ *Football Manager* first arrived in the handheld scene with a cut-down version for the PSP, much-loved by those who dipped in over the years. While the yearly releases saw little more than players and teams being updated, this streamlined version was fun and quick to play, and laid the bedrock for the mobile versions.



▶ content of the game, or is it the name of the game? There was a worry that they would produce some kind of average game and it would be called *Championship Manager*, and everyone would buy that, whereas we might produce something we think is a really good game, but it would be called something else and nobody would buy it because nobody would have heard of it."

It wasn't hasty, though, and certainly fell into the realm of being a calculated risk. Eidos kept the *Championship Manager* name, while Sports Interactive kept the engine, data, and everything else needed to make the games over the decade-plus. On paper, it seems obvious who got the better deal, but the nagging doubts were there. "In the end it went a lot better than expected," Ov smiles. Helped by a loyal community – SI having redeemed itself with *CM 03/04* – and a press sympathetic to the plight of the brothers being bullied by the big bad publisher, the message was put out and spread loud and proud: *Championship Manager* is dead; long live *Football Manager*.

Of course, it's never that simple, and Beautiful Game Studios' platformer never did see the light of day, with the team instead producing something named *Championship Manager*, that looked like *Championship Manager*... but it wasn't *Championship Manager*. Rather than dance on the grave of the now – inevitably – all-but dead branch of the series, the SI gang remains sympathetic. Though not entirely.

» [PC] Team talks didn't arrive until *Football Manager 2006* – at least one way in which Kevin Toms beat Sports Interactive to the punch.

> **"They had to rewrite it. They were unlucky, those guys. Talented people thrown under a bus"**
> Oliver Collier

"It was shit," Miles says. "But when you look at the people who worked on that game, there were some supremely talented people, like Dave Rutter who now runs the *FIFA* games at EA Sports. They had some great people, some of who we even nicked when they shut down. These are hard games to make." Paul offers an explanation as to the impossible task at the foot of BGS: "To explain how difficult it was – if we wiped our drives clean and had to start the whole thing again without any code it would literally take years – about five years. They had to rewrite it. They were unlucky, those guys. Talented people thrown under a bus."

Hammering home how intense it is to create the series, Miles puts on his coder's cap. "The AI in *Football Manager* is actually pretty astonishing," he says. "When most games might have 30 or 40 NPCs, we've got over half a million. When most games' AI is making decisions every few seconds, the match engine in *FM* every single player on the pitch is making a decision every quarter of a second – potentially – there's so much maths that goes into it. It's stuff that we as

FOOTBALL MANAGER 2014

PS VITA

■ Sony's follow-up handheld carried the kind of processing power that Sports Interactive believed could do the full *Football Manager* experience justice. Turns out, it couldn't. While *Football Manager* on Vita is the total package, it suffers from being a terribly slow experience and not something easy to dip in and out of as the PSP version had been previously.

FOOTBALL MANAGER MOBILE & TOUCH

MOBILE

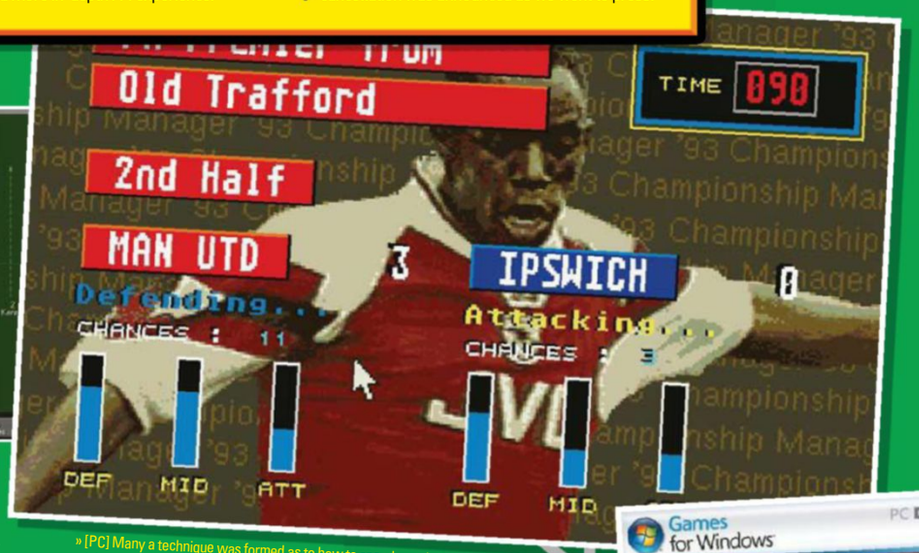
■ All of Sports Interactive's experience in dabbling with the handheld world has eventually led to where we are today – two portable versions of differing complexity. Mobile is quick and simplified, while Touch is available across more powerful tablets – as well as the PC – and offers a more in-depth *FM* experience.

FOOTBALL MANAGER LIVE & ONLINE

2008 (LIVE) 2015 (ONLINE)

■ Sports Interactive hasn't been shy when it comes to trying out *Football Manager* in the online world. Its initial attempt was *Football Manager Live* back in 2008, which lasted just three years. More recently, the studio has launched *FM Online* in Korea in 2015. It's cancellation was announced as we went to press.

» [PC] If you didn't have sketches looking like this in your books at school you were a) too old when *CM2* released or b) not cool. Ahem.



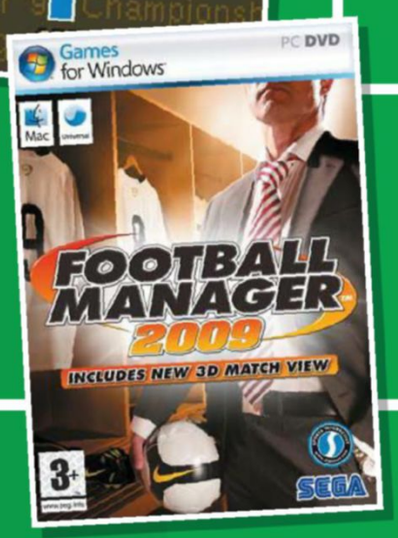
» [PC] Many a technique was formed as to how to speed matches up with the minimum of effort. Usually involving balancing something on the space bar.

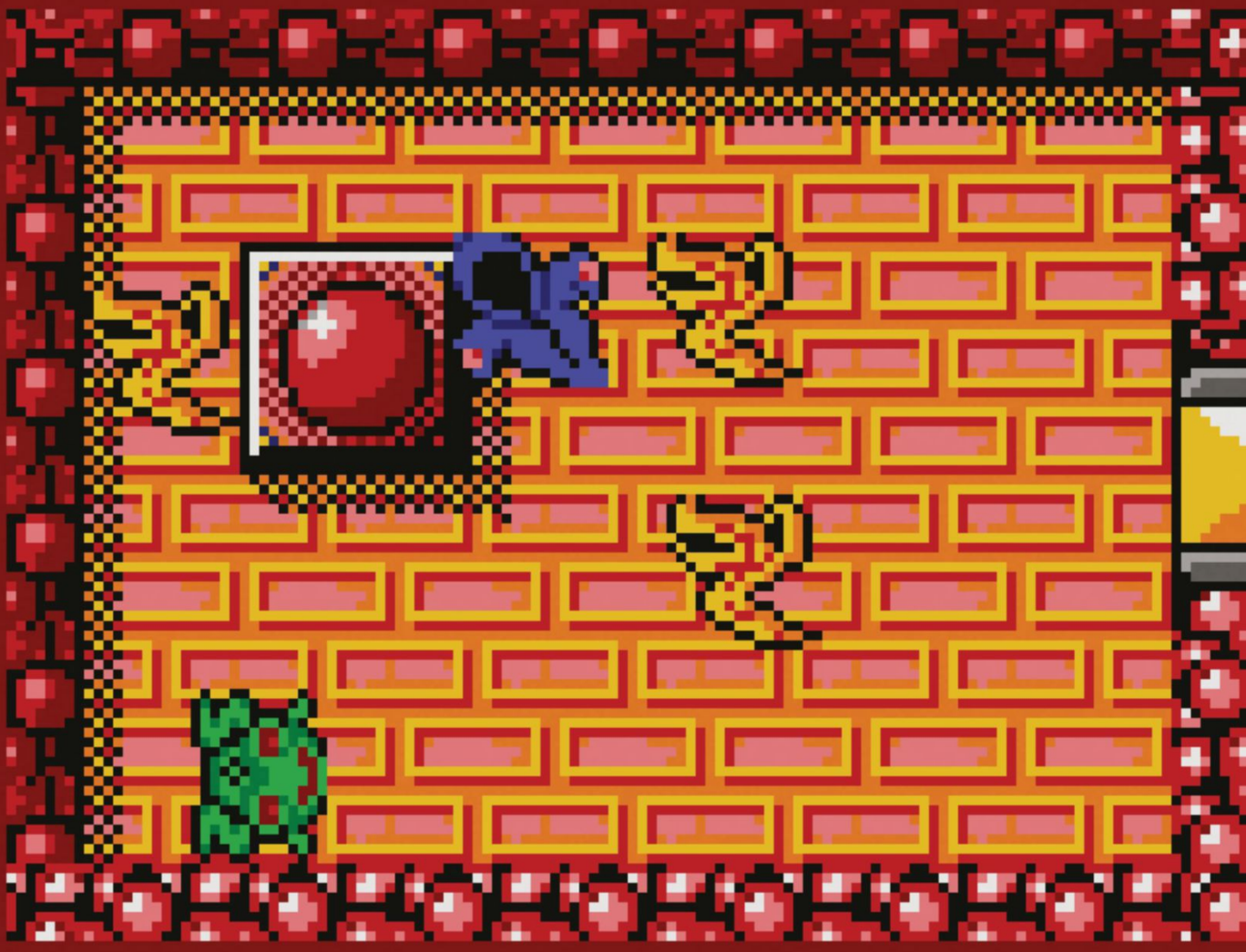
a studio, as a team, should be really proud of having built on it for 25 years. We've built it up and up."

The *Football Manager* series brings us in to the modern era, and it has seen Sports Interactive develop more and increase both in studio size – around 110 employees now, a slight increase on the initial two – and professionalism. Age is a factor too, of course, but for every negative – Paul can no longer play the game, being 'too close to it' – there's an unexpected positive, like long-term studio member Marc Duffy (hired to create SI's first website when he was 14) bringing in design ideas from his own son. "We've become a heritage rock act, who just don't play their greatest hits any more," Miles laughs. "Endlessly making games, it's absolutely non-stop."

Football Manager is part of the modern lexicon now, cited in as many sporting articles as it is academic papers and birthing books, online communities – even a documentary film in 2014. It's something the team is very proud of, as Ov explains: "That the game has reached the levels of being a cultural reference point – you see it mentioned in places where you least expect it, football articles with people commenting about us, everybody knows it – I think we take it for granted, but it's very cool." All of this, this universe of football, has been created as two brothers wanted it to be, sensibly, building up and up as it's aged, maturing and increasing in professionalism. "We set out to create a game world experience," Paul explains. "And we've managed to create a phenomenon without compromising that."

So where do we go from here? 25 years of *Championship* and *Football Manager*, more influence over the world it sought to simulate all those years ago than anyone would have imagined and a worldwide following of millions. With the ultimate experience in crafting the world's greatest RPG, surely Miles and the brothers would want to try their hand at the real thing? Miles says no, he's already involved in other areas and he'd be too rigid on tactics anyway. Paul could see himself getting involved if one of his children was in a team. And Ov? "I wouldn't want to be a football manager," he laughs. "I'd probably be too scared of upsetting people."





Ranarama

WHO LET THE FROGS OUT?

» ATARI ST » GRAFTGOLD » 1990

A recent interview with Steve Turner and Andrew Braybrook in issue 176 revealed that *Ranarama* was a pun on Bananarama, a popular female pop group from the Eighties. What the interview didn't reveal is that Steve Turner's take on *Gauntlet* is still as fun to play now as it was in 1990.

While *Ranarama* shares many elements with Atari's *Gauntlet*, there are numerous differences that certainly manage to work in its favour. For starters it's far more taxing to play than *Gauntlet*, requiring you to really stretch your brain as you collect runes that can be used to cast spells. Said runes are retrieved upon destroying the warlocks that are spread across *Ranarama*'s eight dungeons and defeating them certainly isn't easy. Collide with a warlock and you're thrown into a minigame that requires you to rearrange letters to spell 'Ranarama' within a time limit – it's trickier than it sounds.

Although defeating warlocks and slowly unlocking bigger and better spells is one of the main pulls of *Ranarama*, simply exploring the dungeons is great fun as well, because you never know what you're going to encounter. Unlike in *Gauntlet*, you can only see enemies in whatever room you're currently in, meaning danger ramps up incredibly quickly giving you little time to react. It works in *Ranarama*'s favour, though, keeping you on your toes and ensuring you have to think on your feet at all times.

While the Atari ST version wasn't created by the original author, Steve Turner (the title screen instead credits James Hutchby), it retains all the elements of the original 8-bit games. It's a lot easier to play, too, as the colourful environments mean glyphs stand out more easily, allowing you to instantly zone-in on them when you enter a room. Interestingly, *Ranarama* was never released on the Amiga, making the Atari ST version the only 16-bit port that was officially released.

THE MAKING OF

THE NEED FOR SPEED

Following the buyout of Distinctive Software, producer Hanno Lemke gained prerelease access to a cutting-edge console. Hanno tells Rory Milne how his team reimagined racing games with the 3DO classic The Need For Speed

IN THE KNOW

» **PUBLISHER:** EA STUDIOS

» **DEVELOPER:** EA CANADA

» **RELEASED:** 1994

» **PLATFORM:** 3DO, VARIOUS

» **PLATFORM:** RACING

Like many games developers of the early-Eighties, Distinctive Software's initial output was decidedly eclectic. But by 1987, certain genres had proven popular enough for a studio to specialise in, and this evolution coupled with a love of fast cars led to the firm becoming renowned for its racing games, as former Distinctive producer Hanno Lemke remembers. "A bunch of us were passionate about cars, and we really felt that racing games hadn't captured the experience of driving a sports car on the open road – the personality of the car, the risks and the unpredictability. For us it was like: 'How do we immerse somebody in that experience, and what technology do we need?' The first of our racing games was *Test Drive*, but it was a lot of investment building out a new tech base, and so it was smart to create other experiences with the engine."

Over the next four years, these experiences spanned numerous forms of racing, culminating in a title endorsed by pro driver Mario Andretti that convinced the US firm Electronic Arts to buy Distinctive and rename it EA Canada. To the uninitiated, the studio appeared to take a break from racing games at this point, but as Hanno explains, it was just regrouping. "On the outside, it looked like a pause, but on the inside it was team-building and tech-building. It was a small team that I put together, and we started building out technology. Then we were told this new platform was coming out called the 3DO. We had some early access to the hardware, and we thought this would be what we needed to bring the next level of experience to the racing genre, but it brought up a challenge of rethinking our engine, our tech, our approach and our team."

Instrumental in convincing Hanno to embrace the 3DO was its visionary creator, and EA founder, Trip Hawkins, and his revelation that the console could depict a more expansive and realistic driving experience. "Trip went off and did this thing, and he got us really excited about the potential of CD-ROM drives – we would be able to stream our world and create larger tracks. With the processing power we could do more with rigid body collisions and make the cars feel more realistic."

» [3DO] Collisions like this one may lack realism, but watching them never gets old.

CONVERSION CAPERS

How the other versions of Need For Speed compare

PC

■ Visually, the PC port beats the 3DO original with its higher-resolution cars and tracks. It's also much faster, although its new courses and multi-competitor modes don't have cop cars or law-abiding drivers on them, which leaves them feeling a little sparse. It doesn't feature Mister X, either.

PLAYSTATION

■ Like its PC equivalent, the PlayStation version has three cop-free circuit courses – plus an unlockable one – and the original's open roads. The PlayStation iteration outdoes the original in graphics and speed, and has in-game music and a map showing the positions of the competitors.

SATURN

■ Although the Saturn adaptation has a higher resolution than the original, it looks more pixelated. As with the PC and PlayStation ports, it has seven cop-less circuit tracks, and is more forgiving in terms of recovery time after crashes and the speed penalties incurred by driving on roadsides.

SATURN (JAPAN)

■ Like the PC and PlayStation ports that came out in Japan, this Saturn version was renamed *Over Drivin'*. Unlike it's far eastern counterparts, however, the Saturn *Over Drivin'* replaced the cars from the original with a selection of Nissan models and came packaged with a Nissan keyring.

» [3DO] Avoid scraping against the sides of tunnels as it kills your speed.

» [3DO] Sometimes the only option available is to trade paint. That'll teach our opponents for boxing us in.

DEVELOPER HIGHLIGHTS

NEED FOR SPEED
SYSTEM: 3DO, VARIOUS
YEAR: 1994

NEED FOR SPEED III: HOT PURSUIT (PICTURED)
SYSTEM: PLAYSTATION, PC
YEAR: 1998

BEETLE ADVENTURE RACING!
SYSTEM: N64
YEAR: 1999

» Hanno Lemke worked on 11 different entries in the *Need For Speed* franchise.

But as important as realism was to Hanno's next-generation racing game, it was even more crucial that it was fun to play, and so the producer and his team did some research. "We played a lot of *OutRun* initially – with its variety of terrains," Hanno notes. "I guess there were some PC simulation-oriented titles, but the bulk were pretty twitch-based. We looked at the sensation of speed, the exhilaration of driving. So we played a lot of the racing games at the time – dating back to the top-down *Micro Machines*, but we wanted to deliver a different title to market."

The approach Hanno took to creating something different was to work out why open road driving was so exhilarating, and while doing so the producer identified three distinct routes for his game. "The first route we modelled was 'Alpine'," Hanno recollects. "We had this drive from Vancouver up to a place called Whistler – it was single-carriageway, and was on one side down to the ocean and the other side up to the hills. So we took the boss's 944 Turbo, strapped a video camera into the car and went ripping up that road to get the sense of how things moved past you at 100mph. A drive down the Pacific highway from Oregon to California inspired the 'Coastal' route, and on the 'City' route we wanted a place where you could reach the top speeds."

Although these high-speed experiments convinced Hanno to set his project on the open road, the producer did also consider adding closed circuits. "We wanted the experience of weaving through traffic," Hanno enthuses, "the adrenaline of pushing your speed and hoping you didn't blow it through a speed trap and the sensation when you saw the red and the blue lights in your rear-view mirror. Now, we absolutely loved racing on the track as well, but we had to pick; it was limited resources, limited time."

A second design decision resulted in Hanno's game being based around a one-on-one rivalry rather than a field of competitors, which, as the producer explains, was partly inspired by a bad movie with a great race. "There was this great scene is this movie called *Against All Odds*," Hanno recalls. "It had Jeff Bridges in a Porsche and James Woods in a Ferrari on the Santa Monica freeway,

THE ROAD TO SUCCESS

Your guide to Need For Speed's toughest tracks

CITY ROUTE – THIRD SEGMENT

■ A commercial district with snaking s-bends, this segment starts with a straight where you should get your speed up by pushing the lower gears to their absolute limits. Mister X gets stuck in the district's heavy traffic, so speed your way through it to leave him behind.

ALPINE ROUTE – SECOND SEGMENT

■ This tree-lined mountain pass opens with miles of asphalt spaghetti, so keep it in third and fourth gear, and ease off on the acceleration on the bad bends. Next, thread through the cars on the bridge in fifth before slowing down for the segment's meandering tail end.

ALPINE ROUTE – THIRD SEGMENT

■ Sticking to the road is advised for this wintry segment, as its verges can be sheet ice. Limit yourself to third gear, except on the few short straights. If you're trailing, look for Mister X spinning out on a bend and use this opportunity to take the lead and leave him out in the cold.

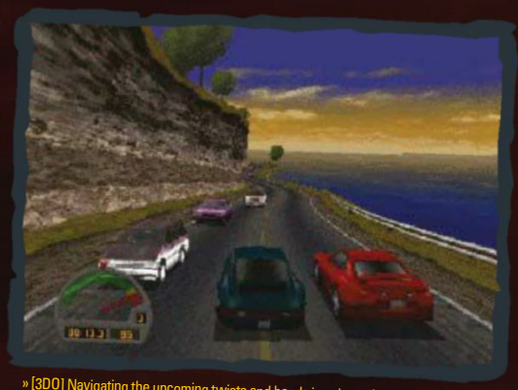
> "We wanted the adrenaline of pushing your speed and the sensation when you saw the red and the blue lights in your rear-view mirror"
>
> Hanno Lemke

» [3DO] Love him or hate him, Mister X has bags of personality.

▶ and they had this grudge-match. They went flying through traffic and red lights – crazy stuff – and that captured the essence of what we wanted. To bring five, six, seven other competitors would have made it feel like a different experience."

But although his project would revolve around just two competitors, Hanno ensured that these duelling rivals would have a number of fast cars to choose from. "We picked a handful of cars very deliberately around their personalities and balance," Hanno reasons. "We felt that none of them were exactly the same, and there was some reason to pick each one, so when you came up against a different car that would be interesting. Is Porsche really better than Ferrari? Is Supra really going to out-do a Lamborghini?"

As well as top-end sports cars, Hanno's artists rendered less exotic vehicles for law-abiding NPC drivers and AI cop cars, the occupants of which took a hard-line approach to speeding that prompted EA Canada to consider the PR implications of virtual lawbreaking. "The legal department had some concerns," Hanno concedes, "and so our pitch was quite simple – there are consequences to crazy driving in the real world, and it's our responsibility to put them in



» [3DO] Navigating the upcoming twists and bends is going to be tricky with this amount of traffic.

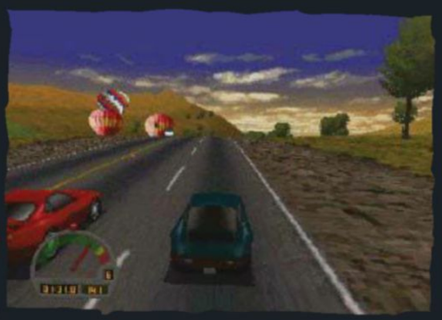
front of players. We made a little bit of fun of the police, like many movies had done, but they were a counter to reckless speeds. So we went with it, and legal said: 'Yeah, okay, we get it.'"

Somewhat less realistic, however, were the over-the-top collisions subsequently implemented in Hanno's game, which pleased the producer far more than others on his team. "We had some physicists on the project," Hanno grins, "and they were, like: 'It's just not real!' And then we had QA testers and us – producers and designers – who were saying: 'Yeah, but this is fun, right?' I think that the balance that we ultimately sought was believable but still fun."

Further debate followed when Hanno and his team got their first look at a series of video clips depicting the player's competitor Mister X, and in particular his repetitive loudmouthed taunts. "He certainly wasn't one of our finest moments," Hanno admits, "but we had a CD-ROM, and we said: 'How do we fill this thing?' So we partnered with a production company. The idea was that when you were racing somebody on the street you would smack-talk each other, but people got annoyed because there wasn't enough variety.

COASTAL ROUTE – SECOND SEGMENT

■ The hairpin bends on the initial stretch of this coastal mountain route are best taken in second gear, the subsequent rural straight allows you to get up to fifth and then it's down to third for the tricky chicanes and fourth for the tunnel near the end of the segment.



COASTAL ROUTE – THIRD SEGMENT

■ A combination of mountains and forests that begins with a largely crooked cliff edge requiring hard acceleration in third gear with a few brief bursts into fourth. After the winding woodland road that follows is a long straight where you can put the pedal to the metal.

» [3DO] How on earth did Lady Liberty find herself half-submerged in the ground? *TNFS* must take place in an alternate reality…

» [3DO] There can be quite dramatic results when you clip the back end of another vehicle.

Half the team hated Mister X, and so one coded an Easter egg where keypad combinations muted him – you would see duct tape across his face!"

However, footage shot by the same firm showcasing the cars in the game and highlighting each vehicle's individual personality went down far better with the team, as Hanno reflects. "I think the production company did a brilliant job in how they filmed some of those cars. They added an introduction for each one, and the lighting and visual effects balanced the cuts of the music. The Diablo was the badass car with the heavy metal, and the Ferrari was more refined. So I think they did a nice job of conveying personality."

On the question of how these vastly expensive sports cars were assembled to be filmed, Hanno reveals that it required the co-operation of two well-known developers. "We didn't have any budget, so we had to convince people to part with their cars and let us do stuff with them. The Testarossa was owned by Chris Roberts – creator of *Wing Commander*, the *Diablo* belonged to Richard Garriott from the *Ultima* days, the 911 belonged to the CFO of EA Canada and in some cases we literally went to random people in the street and asked them if they were interested in being part of this."

In addition to videos, the presentation of Hanno's racing game also benefited from the involvement of an acclaimed car magazine, whose name prefaced the title chosen for the near-complete project – *Road And Track Presents The Need For Speed*.

"They had a load of pictures that they were able to contribute, and they wrote some of the voiceovers for the car presentations," Hanno discloses. "On the engineering side, they helped us understand some of the more subtle characteristics of the cars and how we might portray them in our physics model. To be honest, they weren't gamers, so putting them behind the wheel and giving them a gamepad didn't yield the best fruit. But we played it and they were able to give feedback."

Following on from the game's playtesting, *The Need For Speed* was released to near unanimous acclaim, although Hanno's team acknowledged the few criticisms as well as the many plaudits. "At the time, we were embarrassed by Mister X and anxious about the feedback that the game didn't feel very fast even though. But overall we were happy and proud of the release."

More than 20 years later, Hanno voices satisfaction over *The Need For Speed*'s long-term appeal and looks back at his game with genuine fondness. "It's just cool to see people still going back to it. What I'm proud of is we set the stakes in the ground for what we wanted to do, and we definitely took some risks. I think that we were able to move the genre forward. It was absolutely a riot doing it – I mean, long hours but super fun. It was a formative game in my career, and I'm really super thankful to have been part of it."

Many thanks to Hanno Lemke for racing back to *The Need For Speed*.

Town & Country II: Thrilla's Surfari

Sometimes a deep dive will lead to the discovery of a technical triumph, like this extreme sports platformer

» **PLATFORM:** NES » **DEVELOPER:** SCULPTURED SOFTWARE » **RELEASED:** 1991

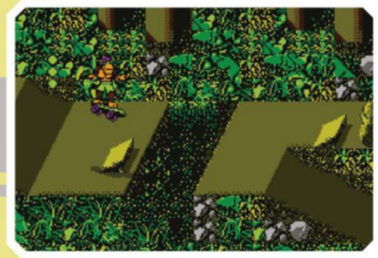
LJN isn't a publishing outfit with a tremendous reputation. In fact, the company achieved notoriety for publishing licensed games of dubious quality during the NES era, and that reputation only became worse as Acclaim acquired the company in 1990. However, just as no publisher is perfect, none are completely imperfect, and amongst LJN's redeeming games you'll find a pair based on the surfboard manufacturer Town & Country Surf Designs.

Where the original game was based on the whole range of the company's mascots, *Town & Country II: Thrilla's Surfari* concentrates on just the most popular of the lot, Thrilla Gorilla. With his girlfriend kidnapped and taken to Africa by the evil Wazula, our simian hero has to ride whatever he can to complete his rescue mission, be it skateboard, surfboard or even a shark. In gameplay terms, this means navigating tricky assault courses in a sort of hybrid of extreme sports and platform game conventions.

What makes *Thrilla's Surfari* stand out is its graphical achievements. Part of this is simply good work on the part of the artists, with great sprite work and well-chosen colours, but other aspects are simply good technical practice. Thrilla's sprite is constructed in such a way as to allow him to be as colourful as possible, skirting the limitations of the NES. Backgrounds combine good art with clever tile recycling, and the developers exploit background tiles for game objects too. With a minimum of sprite flicker and speedy multidirectional scrolling, the graphics give the impression of a very polished overall product.

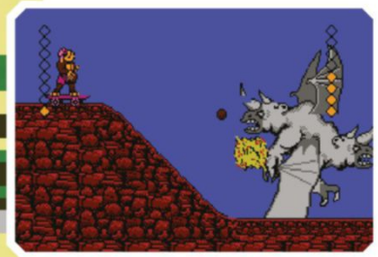
Of course, for all of the technically impressive graphics, *Thrilla's Surfari* is only okay as a game. Level designs are interesting, but often include sections with awkward enemy placement or an inability to regain enough speed to pass a gap if momentum is lost. Desert stages are prone to nasty rock mazes, and boss fights sometimes feel like they depend more on chance than skill. That's not to say you won't have fun with the game – just that it's not in the upper tier of NES games. It's still a worthwhile diversion for anyone interested in fun but flawed games that display some admirable technical prowess.

HOW IT PUSHED THE LIMITS...



Detailed Backgrounds

The NES can only access a limited amount of background tiles during gameplay, but you wouldn't know it to look at the jungles in *Thrilla's Surfari*. Clever graphical arrangement gives the illusion of dense, varied foliage.

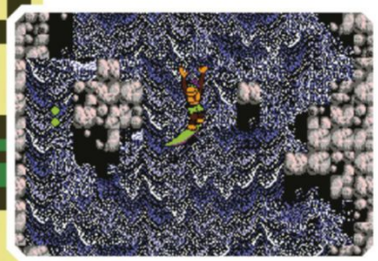


Big Bosses

The game's end of level guardians are huge, but not prone to the graphical flickering or breakup often seen in NES games. This is largely down to the use of background tiles, with sprites used when extra animation is needed.

Lavish Levels

Thrilla needs large levels to move around in because skateboarding is a speedy way to move around, and the game doesn't disappoint. Huge drops and long horizontal runs can be found in the same stage at times.



Speedy Scrolling

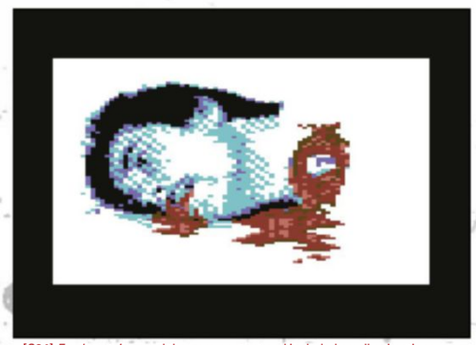
When you reach the waterfall stage, you'll need your reactions to be at their sharpest, as Thrilla's descent is terrifyingly quick. It's amazing that the NES can refresh the level data stored in RAM at the speed required.

COURTING CONTROVERSY

THE HISTORY OF CRL'S HORROR ADVENTURE GAMES

IT WAS A WONDER SOMEONE HADN'T TRIED IT ALREADY: MAKE A VIDEOGAME SO VIOLENT AND SO BLOODY THAT THE FILM CENSORS HAD TO SIT UP AND TAKE NOTICE. THEN REAP THE REWARDS OF THE RIGHTEOUS INDIGNATION BECAUSE, AS THEY SAY, THERE'S NO SUCH THING AS BAD PUBLICITY...

In the era of *Grand Theft Auto, Resident Evil* and *Call Of Duty,* it's hard to imagine a time when videogames were unregulated, with no PEGI ratings, no age restrictions and effectively no guidance for parents whatsoever. But a time existed, before *Mortal Kombat, Doom* and FMV 'nasties' such as *Night Trap*, when videogames were perceived as 'just for kids'. As technology rapidly improved, the change in this perception was inevitable; but this change was partly instigated (in the UK, at least) from another section of the entertainment industry. By 1984, the 'video nasty' controversy had reached such a peak that the Conservative government was forced to act, specifically with the Video Recordings Act, a piece of legislation that effectively gave the British Board Of Film Classification (BBFC) powers over what cinematic work the public could and couldn't see. The publicity was intense; some banned films, such as *The Exorcist* and *Straw Dogs*, became famous through their notoriety, and in many ways the act simply fuelled the desire of people to watch these supposedly dangerous movies.



» [C64] *Frankenstein* upped the gore content and included small animations.

Back in the world of videogames, the adventure game was still proving a popular genre. With the advent of adventure creation utilities such as The Quill and Professional Adventure Writer, any fan with an imagination could conjure up a story for others to puzzle over and explore. Yet this proved to be a double-edged sword; by the mid-Eighties, adventure games were everywhere, and no-one was buying them, at least not in any significant number. One such fan was Rod Pike, a middle-aged Commodore 64 owner from East Anglia, and a lover of classic fiction. Like many, Rod submitted his first effort in to a software house, unsolicited, in the hope of publication, and for reasons unknown, he chose London-based CRL. Meanwhile, the genre had proven itself to be a fertile ground for budding artists, and Jared Derrett was a typical example. Jared was introduced to the software house in 1984 – his brother, Jay, worked there as a coder, as well as his sister, Lorna, in the software house's office. "I only went there so I could mess about with Melbourne Draw on the ZX Spectrum and Koala Paint on the Commodore 64," recalls Jared. "I was just copying game cover art for some upcoming releases when Mike Hodges popped over and I thought, 'Oops, I've outstayed my welcome.'" However, CRL's general manager offered the young artist a job. "I was on more money than my friends and didn't have to work outside in the cold to get it!" laughs Jared, who would soon find himself at the centre of a media storm.

CRL had been formed by Clem Chambers in 1982, initially with the aim to distribute computer equipment

» [Amstrad CPC] Probably our favourite of all the excellent loading screens.

(CRL standing for Computer Rentals Limited). When the games software market exploded a year later, Clem pivoted the focus of his business, and began publishing some of the many submissions that he was receiving every day. "Games were like pop singles to me," Clem told us back in issue 97's retrospective on the company. "Each one had approximately six weeks of life, so I concluded the best way to stay alive was to release one after the other, fire and forget." During 1983 and 1984 CRL released a number of forgettable titles that nonetheless sold steadily. By 1985, however, competition had become much fiercer; software houses were falling by the wayside with depressing regularity, and it was clear to Clem that CRL's games needed to be either something exceedingly special, or based on a licence of some description. The former was covered mainly with Pete Cooke and his excellent space adventure games *Tau Ceti* and *Academy*. Unfortunately Clem had less success with licensing as games based on *The Magic Roundabout*, *Terrahawks* and *Blade Runner* (the music, rather than the film) all disappointed. Another angle was needed.

By 1986, CRL were still receiving many third-party submissions, often adventure games. "[Adventure games] were tired and dying out by then and I could have signed tons of them," Clem told us in issue 97. Nevertheless, he saw enough potential in a well-written and atmospheric game that had been created using popular utility The Quill to publish it for the C64. *Pilgrim*, a simple vengeance tale, contained impressive lengthy descriptions, albeit fewer locations than was

» [C64] *Wolfman* strikes – and this time you are the bad guy.

EVIL SPREADS

The four apocalyptic horseman of CRL

DRACULA

■ Sometimes wordy, often byzantine in the solution to its puzzles, *Dracula* took the player, as Jonathan Harker, to the count's abode, and then back to England as Doctor Seward. As would become standard for the series, there were few, if any, location graphics; instead, images popped up in front of the player whenever Harker had a dream, Dracula appeared or they took a wrong step and were killed, usually in gory way. The C64 version contains lovely blood-stained pictures, with the Amstrad just behind it. The Spectrum version isn't good at all, It suffers from bad colour – featuring gold text on a blue background.

FRANKENSTEIN

■ Rod Pike's follow-up to *Dracula* followed the three-act template of its predecessor, with the third part seeing a change of character for the player again as they take on the mantle of the tortured monster itself. The plot, however, chiefly concerns Victor Frankenstein himself as he attempts to destroy his creation. Leading the way once more is the Commodore version, this time with tiny animations inserted into some of the death scenes. It was not enough to secure an 18 certificate as *Frankenstein* also received a 15, including, bizarrely, the Spectrum game, which contained virtually no graphics whatsoever. At least it was more legible this time round.

JACK THE RIPPER

■ This was the game that spread the word of what CRL was doing, possibly due to its real-life monster rather than a work of fiction. Written by St Brides, which subsequently distanced itself from the garish graphics added on by CRL, *Jack The Ripper* comfortably secured an 18 certificate, and with it countless pages of the newspapers. Fighting with the game's parser is as common as evading your foes. Unlike Rod Pike's games, it's written with the Professional Adventure Writer, and as such takes advantage of that system's real-time and RAM-saving elements. Quite horrific in places, it fully deserves its 18 rating.

Its pale light illuminates the heavens in a soft glow. I feel a strange stirring within..
I'm ready for your instructions.
>HOWL
Yes! That's it. Something to do with wolves...I feel it!
Yes..yes I can
I am changing.....OOOHH!
The agony is beyond.....
BUT WORTH IT! Now I can kill
Now I am strong! Now I can kill too!
I see the full moon rising above the cliffs a little way distant. Its pale light illuminates the heavens in a soft glow. I feel a strange stirring within..
I await your command
>I'M ALRIGHT NOOOOOOOOOOOOOU

WOLFMAN

■ Rod Pike's last game for CRL saw him achieve the strictest restriction, chiefly thanks to the player taking on the role of the titular killer, terrorising the nearby population whenever there's a full moon. While the game mainly follows the human protagonist's fragile relationship and attempt to cure the lycanthropy, its razor-sharp violence against innocents disturbed the BBFC enough to ensure an 18 rating. The player would take on the role of the wolfman for parts one and three and his fiancée, Nadia, for the middle segment. In addition to its controversial theme, the animation was upped too, with a scene where a young woman has her head ripped off by the wolfman.

A GRAPHIC DEATH

Some of the more unfortunate fates that can befall you in CRL's macabre adventures

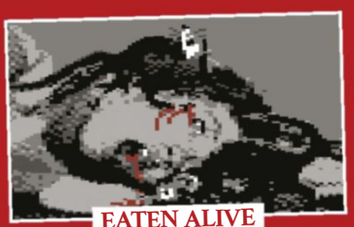
EYES PECKED OUT BY BIRDS

COACH CRASH

SUFFOCATION

DEATH BY FALLING

FROZEN STIFF


EATEN ALIVE

A PAIN IN THE NECK

KNIFED IN THE NECK

IMPALED ON BROKEN GLASS

STABBED

BITTEN AGAIN

THROAT SLASHED

THE MONSTER MASH

SPLATTERHOUSE

■ Student Rick Taylor is a mild-mannered and polite character until he dons the Terror Mask, upon which he becomes an killing machine, devoid of emotion and focused on one task: to save his girlfriend, Jennifer. Clearly based on *Friday The 13th*'s Jason Voorhees, although given a helping hand for his psychotic behaviour.

▶ normally expected. The game also lacked one other crucial facet: graphics. Today, Clem explains how its author, Rod Pike, was persuaded to write the first game of a series that would see CRL feature in the pages of the tabloids. "I was looking to find my own range of adventure games," he says, "and after the success of Fergus' games, it was natural to do more." In addition to *Pilgrim*, CRL had published adventure games from Fergus McNeill's Delta 4, most of them spoofs of well-known novels. Mysterious all-female developer St Brides had also sold games to Clem, including the lagomorphic *Bugsy* and another spoof in *The Very Big Cave Adventure*. St Brides would have a vital role to play in this story, too, but more on that shortly.

Sufficiently impressed by *Pilgrim* ("A dark and moody piece," recalls Clem), CRL tasked its author with a follow-up horror game of some description. Shortly after, Clem had the brainwave of basing it on the one of the most famous Gothic novels of all time. "Bram Stoker was well out of copyright," says Clem, "so we obviously made no attempt at getting a licence. But it was an instantly recognisable name." Then the lightbulb above his head lit up. "The idea was driven by the video nasties act. A subsection said that if you had a computer game that was sufficiently relevant, you could submit it for a film certificate." Clem was quite correct in assuming the resultant furore, expected given the general view of videogames, would propel *Dracula* and

Ring bell
The bell rings a polite summoning call.
The innkeeper shuffles through the door behind the desk. he is poorly dressed, but clean and tidy. his attitude strikes me immediately as..humble?...no!.. his head is bowed, but when i catch sight of his eyes, i see ....fear!.
he speaks to me in a broken, almost apologetic english,"you wish to stay with us yes?"
i reply that i do."sorry i not speak english well,please,to keep simple".i quickly grasp the man's level of understanding.
"yes"i say,perhaps a little loudly.he turns and takes a key from a peg....
more...

» [ZX Spectrum] Dealing with the locals in *Dracula*.

Five More Games Based On Less-Than-Wholesome Characters

THE SUFFERING

■ Set in a rotting island penitentiary, *The Suffering* is the story of Torque, a death row prisoner convicted of murdering his family. Venturing deep into insanity, he slowly transforms into an emotionally-fragile, but physically impervious muscled beast that destroys all before it – friend or foe.

BLOOD

■ Ex-Gunslinger and leader of a demonic cult known as the Cabal, Caleb is hardly your regular hero type. Killed by his own god, Caleb rises from the grave to seek revenge, often accompanied by a witty quip. Think a deranged undead Duke Nukem with horrific facial injuries and you're almost there.

RAMPAGE

■ Despite their comic appearance, these guys are most definitely monsters! Tearing apart buildings, crushing vehicles and chomping on humans is all in a day's work for the quaintly-named Lizzie, George and Ralph. Given they are actually transformed humans... make that cannibalistic monsters. Nice!

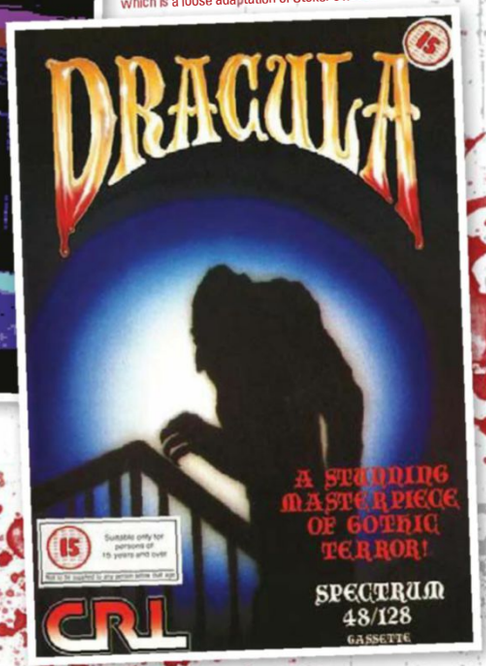
GRAND THEFT AUTO

■ Monsters come in all shapes, and horror movies have long been obsessed with the banality of evil. In 1997, the original *GTA* caused a ruckus with its crime-laden antics. Yeah, sure, you can just potter around – but who didn't commit the monstrous act of jacking a car then running over its owner for good measure?

"IT BECAME OBVIOUS TO US WE NEEDED SOMETHING EXTRA IN ORDER TO GET THE 18 CERTIFICATE'

Clem Chambers

» [C64] Each adventure carried evocative loading screens.

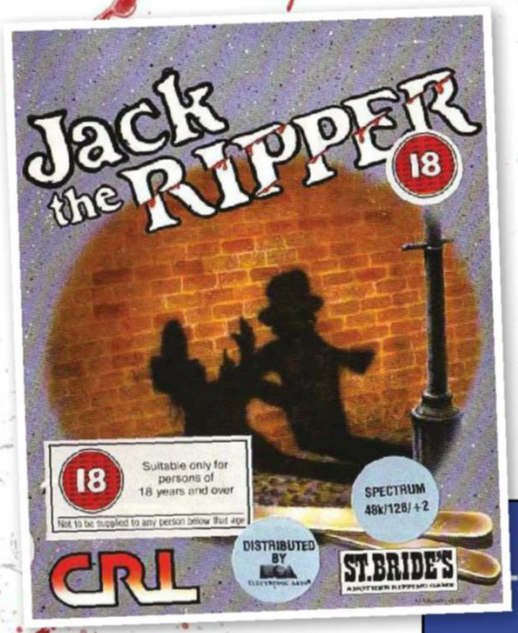


» This artwork for *Dracula* resembles *Nosferatu* – which is a loose adaptation of Stoker's novel.

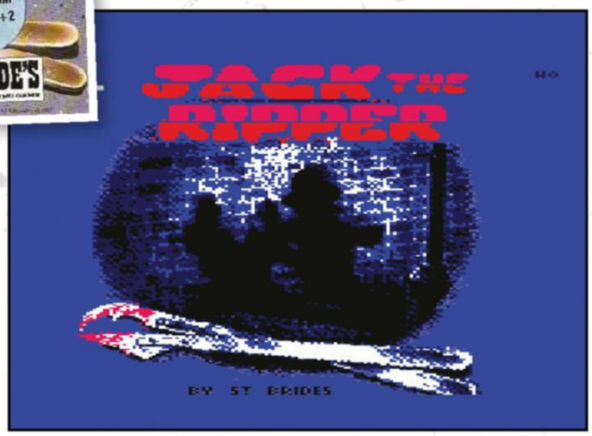
further similar games into the public consciousness, despite the tired adventure game format. The game itself came in three parts. The First Night, sees the player, taking on the role of English solicitor Jonathan Harker, arriving at a hotel close to Count Dracula's ominous castle. As night approaches, encounters with preoccupied locals disturb the young man until events take an even stranger turn once darkness arrives. In part two (The Arrival), the player meets the count and soon becomes a prisoner in the vampire's abode; our hero must escape the clutches of the evil count before he himself becomes the main course in a banquet of blood. Finally, part three is set in England as asylum owner Doctor Seward receives a disturbing missive from his friend abroad. That's the least of his troubles: a missing inmate is soon wreaking havoc on the nearby towns while under the influence of Dracula himself.

At a different type of imposing castle, BBFC headquarters, the standard film submission form was sent to CRL, which wedged Dracula as best it could into the application for a certificate. The entire script to the game was included, along with the graphic images that appeared throughout. The book was adapted as faithfully as you'd expect by Rod Pike, with the necessary puzzles and tasks inserted throughout in order to create a challenge for the player. It wasn't, however, the vivid descriptions by Rod that CRL pinned its certification hopes on. Each time the player met their demise, a graphical depiction of the gory death would be shown. Including throat-slitting, suffocation and, unsurprisingly, neck-biting, Clem and his team hoped the images would be gruesome enough to earn Dracula a tabloid-baiting 18 certificate. The reaction from the censors was measured, and disappointing for CRL. "Playing the game formats [the submitted] text so it reads sequentially," wrote one examiner. "On consideration, playing the game will not be any more enlightening than reading this text, and looking at the graphics, which are all stills, may negate the need to see the game running." Rod Pike's lurid descriptions themselves failed to bother the examiners, while the process by which the goriest images were achieved disturbed them the most. Betraying their prejudice on the general audience for videogames, *Dracula* was awarded a 15 certificate, mostly on the basis that it would be "distressing to play alone prior to bedtime". It was an achievement for CRL, but not enough. "It became obvious to us we needed something extra in order to get the 18 certificate," notes Clem. "We needed… animated graphics."

CRL's lead artist was Jon Law, and he and Jared Derrett worked together to see how they could take the horror images to the next level. Jared explains, "Jon and I would discuss the shots and rig a CCTV camera to a newly-purchased digitiser. Jon was an avid amateur photographer and would spend forever lighting scenes in the void, a huge and mostly empty warehouse space near our offices." By the time of *Jack The Ripper* and *Wolfman*, another Derrett sibling, younger sister Lara, had also joined the CRL staff. Lara, Lorna, coder Jeff Lee, and even the office cleaner were cajoled into playing victims in the various games. "We'd shoot the images, then Jon and I would set about ripping throats out, slashing faces and plucking out organs!" exclaims Jared, a little too excitedly. But breathe easily, dear reader: all was done in post-production, naturally, including the nudity of some images, conjured later by Jon Law. "We loved the digitiser," continues Jared, "and for about three weeks, it was the future! But for us, it quickly became a soulless bore that often took longer to hammer into a usable image than rotoscoping from the acetate film Sellotaped to our monitors."



» The controversy reached a peak with St Bride's take on Jack The Ripper.



» [Amstrad CPC] London-based horror featuring Saucy Jacky.

With *Dracula* selling steadily rather than spectacularly, the CRL chief had the wind in his sails as he pressed Rod Pike for a follow-up adventure based on another piece of classic literature. Mary Shelley's *Frankenstein* was a logical follow-up to *Dracula*, yet even with some – admittedly quite basic – animation, it failed to achieve CRL's coveted 18 certificate. Taking control of the misguided Victor Frankenstein, the player begins the hunt for his hideous creation after it has apparently brutally murdered his sister. His mission takes him to Switzerland and a final confrontation with the monster at the end of part two. In part three, the player once more is transported to another mind, this time the fevered brain of Frankenstein's creation itself. As with *Dracula*, death graphics permeated the game, but the 15 certificate prevailed. It was another disappointment, although Clem and CRL didn't have long to wait; developed concurrently with *Frankenstein* was another game based around a real horror story that has been countlessly retold since: Jack The Ripper.

As Rod Pike busied himself quilling *Frankenstein* and its follow-up, *Wolfman*, CRL was approached by another of its developers. "St Brides wanted in on the certificate idea," explains Clem. "And I think they felt they would go straight for the jugular, so to speak, by doing *Jack The Ripper*. We were the only game in town, because no one else had the nerve." The twin attack of *Wolfman* and *Jack The Ripper* would finally make the breakthrough and score a brace of the desired age restrictions, but for differing reasons, with the latter also the game that caused the tabloids to go into overdrive. While the graphics of *Jack The Ripper* were compared to a horror movie, it was the intense descriptions from St Brides that mainly drew its 18 certificate. While anticipating the uproar, the BBFC passed the game uncut, despite the sensational images shown on the game's back cover. The sight in-game of one of the Ripper's victims, sliced open and entrails spilled out, coupled with its ghoulish descriptions, made an 18 inevitable; but the BBFC were not overly concerned. For much of the tabloid concern focused on young Jared Derrett, barely 16 years old at the time. He recalls, "I remember the 'red tops' were always on the phone, pseudo-moaning about how irresponsible it was for a 16-year-old to be doing art on an 18-rated game. The answer was simple. While I was doing the art, the game was uncertified; as long as I didn't play the game, then no harm, no foul. I found it all incredibly cool."

In *Jack The Ripper*, the player takes on the role of an innocent bystander, falsely accused of a vicious

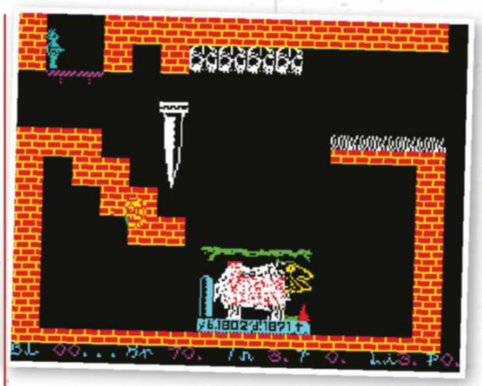
> **"IT WAS TYPICAL MORAL PANIC AND WITHOUT THE MEDIA, NO ATTENTION SEEKER WOULD GET THE OXYGEN THEY CRAVE'**
>
> Clem Chambers

THE HORROR! THE HORROR!

Five More Bloody 8-bit Controversies

BARBARIAN: THE ULTIMATE WARRIOR

■ It wasn't just *Barbarian*'s advertising campaign that caused controversy; its mother-baiting yet teenage boy-enthusing decapitation move caused a ruckus too. Oliver Frey's cover *Crash*, depicting an imminent bloody death move, stoked the fire further.



SOFT AND CUDDLY

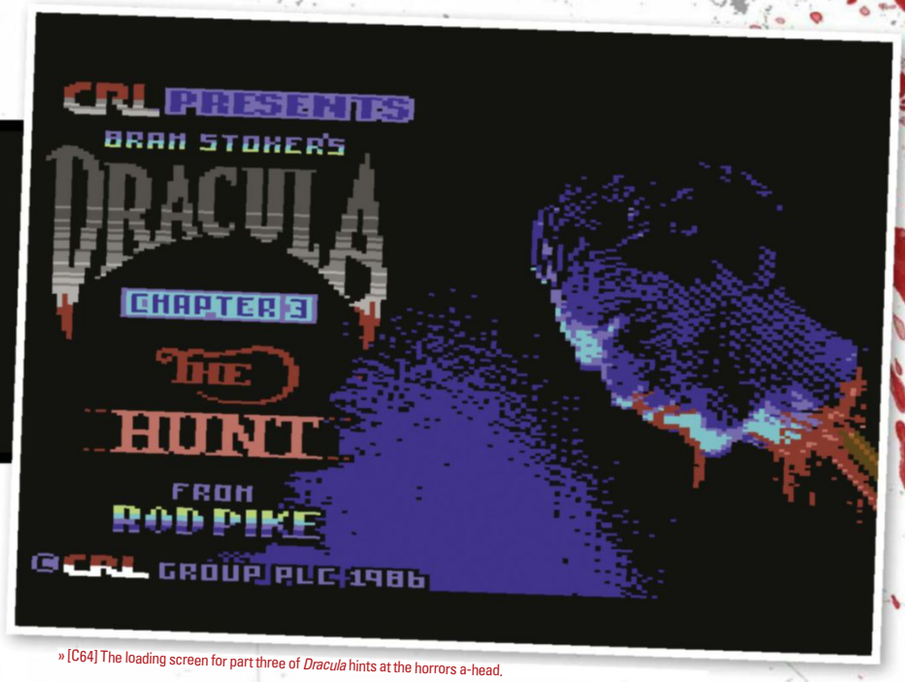
■ This was programmer John George Jones' follow up to the demonic *Go To Hell*, and another obvious attempt to see what reaction he could get from gaming press and public. In truth, the game was more bizarre than horrific, but that didn't stop quite a few people getting a bit upset.

OLE TORO

■ A simulation of a real-life sport may not seem provocative, but when the sport in question is the Spanish pastime of bullfighting, controversy is inevitable. Americana's game was quite poor in gameplay terms, but the subject matter incited the animal-friendly *C&VG* to award the game 0/5 for just the idea alone.

I am in my study.A somewhat crowded repository of books and records.My desk is strewn with notes.To the west is the hall,while east is my bedroom.
My name John Seward,I am a doctor of the mind and own an asylum here in Purfleet. The grounds are extensive.Adjacent is the Carfax estate,the house of which has stood derelict for years.
Renfield,one of my patients,escaped last week.He has absconded before but the police always catch him,so no need to worry.He is harmless.Spends his time feeding flies to spiders,then eating the spiders.It says that if one spider has eaten fifty flies,then he will absorb the strength of the flies,by eating the spider!Ah well,the logic of a madman.
Press any key to continue

» [Amstrad CPC] Part 3 of Dracula switches characters and location.



» [C64] The loading screen for part three of *Dracula* hints at the horrors a-head.

murder. In order to prove their innocence, they must track down and implicate the murderer – the eponymous Victorian villain. *Wolfman*, however, is a different proposition. Here, the player assumes the role of the title character, a conflicted man caught in the devilish embrace of lycanthropy. Rod Pike and CRL had finally hit a theme that caused the most consternation within the walls of the BBFC. Relatively unconcerned about the graphic images, the examiners took umbrage with the role the player assumed in *Wolfman*. No longer the brave hero proving their innocence or fighting an ancient evil, *Wolfman* gave the opportunity to plague a township as the hairy beast, ripping open throats and slashing at locals, usually with CRL's trademark graphics as a result, and often against women. This disturbing role-reversal, more than anything else, ensured *Wolfman* too would secure an 18 certificate from the BBFC.

The dedicated videogames press was one thing; the commotion in the tabloids was music to Clem's ears as the machine that CRL was manipulating duly delivered. "It was typical moral panic," he tells, "and without the media, no attention seeker would get the oxygen they crave. Without the media there could have been no provocation." Away from the papers, videogame magazines news sections were awash with *Jack The Ripper*. "[CRL's] new game breaks new ground – or plumbs new depths, depending on your point of view," said multiformat magazine *ACE* in its January 1988 issue before pointing out exactly what most people were thinking about the game's proposed 18 rating. "There's no doubt, of course, that the game shouldn't be played by under 18s…but producing it on the C64 and Spectrum means that there are an awful lot of under 18s around who could play it." The discussion continued the next month as *Jack The Ripper* brought to a head the issue of whether many other videogames, lacking certification, were actually illegal under the Video Recordings Act. But that's a story for another time.

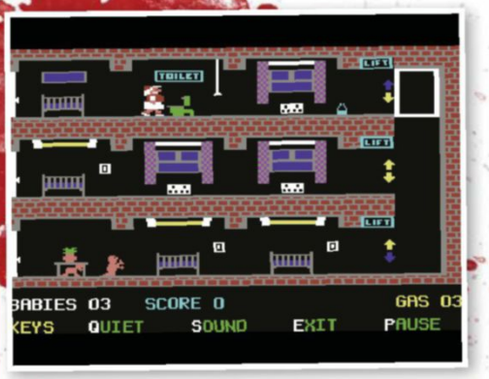
Wolfman proved to be the last of CRL's horror adventures, save a Rod Pike compilation in 1988. "We fell out with our distributor and that was more or less curtains for CRL," laments Clem. "The market had moved on, too – graphic text adventures were going obsolete, just as text-only adventures had before them. They just stopped selling completely." Jared Derrett, a fresh-faced teenager at the time, has nothing but admiration for the publicity machine the CRL boss set in motion. "Seeking a BBFC certificate was just pure genius! At the time, it was about selling games; now it has proven a point about protecting children, whatever the medium. And Clem showed the world that marketing, like water, will find and exploit the cracks to create canyons within its world. But we loved it; we were mostly anonymous kids, working in an old warehouse in the arse-end of London. And then there we were, getting national press on the phone, wanting to know about this monster we'd created."

Undoubtedly fuelled by CRL's desire to garner as much publicity as possible, these four games transformed much of the public's perception of videogames in the Eighties. This change was met with great resistance from some quarters, yet has led us to the maturer, more aware industry we see today. To quote the great Mary Wollstonecrafty Shelley from her novel *Frankenstein*, "Nothing is so painful to the human mind as a great and sudden change." ✱

Our thanks to Clem and Jared for their time.

DEATH WISH III

■ Let's be honest, a videogame adaptation of the violent Charles Bronson movie was never going to be a quiet affair, and Gremlin Graphics duly delivered a brutal and morally dubious take on the film. Of particular delight was the globular mess that Bronson reduced miscreants (and innocents) to with his rocket launcher.



MAD NURSE

■ A cheap and cheery platformer is perhaps not where you would expect to find notoriously controversial game design, but here was the ability to electrocute, poison or drop babies down lift shafts. All done with a cheeky sense of humour, but a slightly disturbing one, nonetheless.

» [ZX Spectrum] The CRL team did its best to recreate its horrific images for the Speccy.

THE UNCONVERTED

Arcade games that never made it home

CHARLIE NINJA

DEVELOPER: **MITCHELL CORPORATION** YEAR: **1994** GENRE: **RUN-AND-GUN**

■ **Sometimes, certain combinations of things sound like they shouldn't work, but come together in a surprising and delightful way – pineapple and pizza, Nick Cave and Kylie Minogue, *Puyo Puyo* and *Tetris*.** Well, you can add fighting game moves and run-and-gun gameplay to that list, as *Charlie Ninja* pulls off the unlikely fusion very well.

Charlie Ninja's plot, what little there is, centres on a tiny ninja (or two, in co-op) trying to bring in wanted men for bounties. To do this, they must venture through bizarre worlds which seem to represent a hyper-stereotypical version of the USA, from the old West to a military battlefield and some rather run-down backstreets. Enemies are caricatures, from gun-toting cowboys to *Rambo*-esque soldiers and meathead football players. It's all pretty amusing, up until you come across some of the less socially acceptable examples – for example, the only female enemies are revealed to actually be men dressed in cheerleader garb, and the tomahawk-throwing native Americans look suspiciously like white dudes playing dress-up. The worst example is a boss named Freddie who is nothing more than a horrendous gay stereotype – he dresses in leather, poses effeminately and attacks you with kisses.

But if you can stomach the un-PC nature of what's going on, you'll find a rather well-constructed game. The level designs are pretty simplistic, so the game relies on good combat to entertain. Thankfully, as well as the standard running, jumping and power-up grabbing, your ninja has some cool special abilities. The game tells you about temporary invincibility, activated by pressing both jump and shoot at the same time, but there are a few extra *Street Fighter*-style specials that can help you out in a pinch, including a spinning kick and an uppercut. This adds a little bit of extra depth beyond the standard run-and-gun formula.

Although we can see how some of its graphics wouldn't have been appropriate in the eyes of home console manufacturers, the changes needed to bring *Charlie Ninja* to the home would have been relatively minor. Mitchell Corporation just wasn't in the habit of producing home conversions of its games in the mid-Nineties, so it never happened. If you're not upset by what you've heard here, give it a try.

■ These pink barrels contain pick-ups including new weapons and power boosters. You can shoot them open, but it's more fun to get up close and throw them.

■ Charlie has managed to conceal himself here, allowing an enemy attack to pass through him. He'll have to uncloak to attack.

■ Freddie here wouldn't have flown with console manufacturers, even in the mid-Nineties – a similar character called Ash was cut from *Streets Of Rage 3*.

■ These flame jets will hurt your ninja, but not the enemies. Oddly, though, if you reveal a cluster of spikes from a pick-up box, the enemies will react to it.

CONVERTED ALTERNATIVE

SPIN MASTER

1993

■ Data East's Neo-Geo game has a fair number of similarities to *Charlie Ninja* – the run-and-gun format, the cartoon style and even the use of shurikens are common to both games. Of course, *Spin Master* actually appeared on the Neo-Geo AES, before coming to the Wii in 2010.

DOUBLE AXLE

DEVELOPER: **TAITO** YEAR: **1991** GENRE: **RACING**

■ In most racing games, collisions are to be avoided. In *Double Axle*, they're more or less mandatory. This game places you behind the wheel of a monster truck, with the goal of finishing in third place or better across a series of races. If you run out of time, the game is over. Before each race, you have the option of purchasing upgrades including nitro boosts and an improved engine, and more cash can be won after each race.

Of course, if you were racing monster trucks around standard race tracks, it wouldn't be much fun. *Double Axle* therefore presents you with some varied courses in which you can smash through canyons, knock down houses, trample forests and commit all manner of wanton vehicular crimes. It's boisterous, bruising racing and that sets it apart from the slick racers with their sports cars and licensed F1 cars.

If anything prevented *Double Axle* from coming home, besides obscurity, we can assume that its graphical demands were the culprit – with very heavy use of scaling sprites, it would have been a major challenge for any of the 16-bits to produce a faithful home experience.

» [Arcade] You can take on some pretty extreme banked curves when your tyres are the size of houses.

CONVERTED ALTERNATIVE

18 WHEELER: AMERICAN PRO TRUCKER

2000

■ The march of technological progress means that Sega's haulage game doesn't look much like *Double Axle*, and the emphasis here is on beating the clock, with rivals as a secondary concern. However, the two games do at least share the theme of racing gigantic vehicles.

CONVERTED ALTERNATIVE

THE LAST BLADE

1997

■ When compared to the weapon-based 2D fighting games that SNK made famous, *The Killing Blade* feels closest to *The Last Blade* – particularly when played with a character in Speed mode as opposed to Power mode. This is thanks to the lower levels of attack damage in the IGS game.

THE KILLING BLADE

DEVELOPER: **IGS** YEAR: **1998** GENRE: **FIGHTING**

■ In the UK, we have certain romanticised historical periods that are popular settings for fictional works – Tudor England, for example. In China, the Three Kingdoms period has the same effect, and IGS has utilised it for this one-on-one fighter. Characters are armed with weapons and have the usual array of special moves, but what sets it apart from the competition a little is the presence of dual-super meters. The red gauge builds as you deal and receive damage, and enables a high-damage, multi-hit attack when full. The blue gauge builds when your attacks are blocked, and can be charged manually. When filled, it enables a special ten-hit combo which must be entered manually, but leaves further combo potential if completed successfully.

» [Arcade] The sprite work here just doesn't compare with the likes of *Street Fighter Alpha* or *The Last Blade*.

In the parade of fighting games from the Nineties, *The Killing Blade* lands in the middle of the pack. It's no challenger to the likes of Capcom and SNK – the backgrounds are blander and character sprites are less detailed, and the gameplay feels less precise, as hitboxes are not so well defined. But it's no waste of time, and deserves at least some attention.

BEST LEFT IN THE ARCADE

HYPERDRIVE

DEVELOPER: **MIDWAY** YEAR: **1997** GENRE: **RACING**

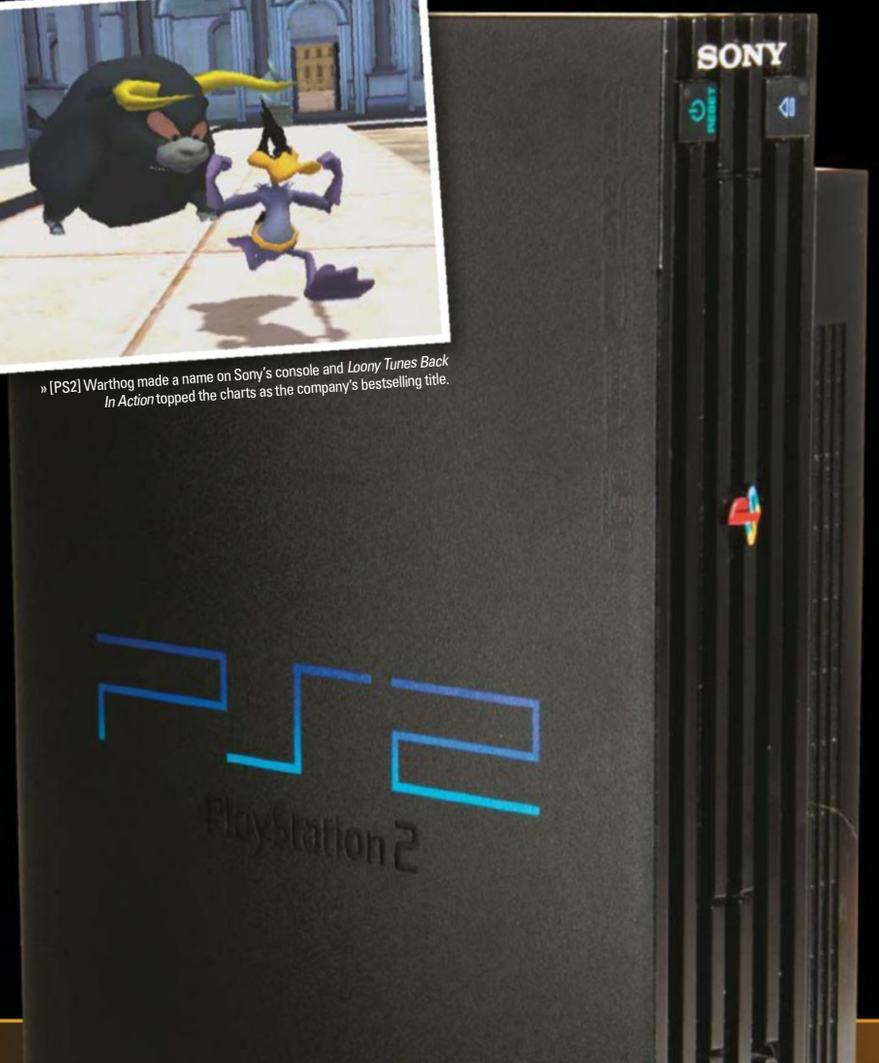
■ The futuristic racing genre has rarely met much success in arcades, and while that's tragic when you consider games like *F-Zero AX*, it's nothing less than justifiable for *Hyperdrive*. The gimmick here is that as well as being able to steer your ship left and right as normal, you also have limited vertical control for flying over obstacles and flying through boost gates, handled by tilting the steering wheel back and forth.

This sounds promising, and the 3D graphics are nice enough for the era, but the track design is simple and wholly unsatisfying. Obstacles feel more like nuisances than anything else – you spend an awful lot of time moving in a straight line, and even the presence of hazards like asteroid showers can't enliven proceedings. Pulling off successive boosts by correctly lining up your ship can be satisfying and there's a convincing sensation of speed, but there's really no reason to bother with *Hyperdrive* when so many better alternatives exist in both the home and the arcades.

WAR

It began by developing space games and ended up mingling with stars. But, as Paul Hughes tells David Crookes, Warthog Games – which eventually became known for its cartoon-like titles – came crashing down to Earth thanks to the failure of a certain handheld…

» [PS2] Warthog made a name on Sony's console and *Loony Tunes Back In Action* topped the charts as the company's bestselling title.



Electronic Arts treated its people like rock stars," begins Paul Hughes who worked for the publisher in Manchester during the mid-Nineties. It was a time when the city was being dubbed 'Madchester' by the media thanks to its flourishing music scene. But just as Oasis were putting out its overblown third studio album, *Be Here Now*, in 1997 – which some might say heralded the beginning of the end of the 'Mad Fer It' era – EA decided the rock and roll stars of their northern studio had to disband. "EA announced its intentions to close down the Manchester office," Paul laments. So a group of ex-staffers decided to set up on their own.

EA Manchester had been successful. Created by Erin Roberts with Nick Elms in 1994, it had worked on *Privateer 2: The Darkening*. But Electronic Arts wanted to consolidate its UK operations in the south of England. By this time, Erin had already left to set up Digital Anvil in the United States with his brother, Chris Roberts. "But Nick and Phil Meller [who were talented artists/designers at EA Manchester] were also talking in the background with Ash Hall and Nick's dad, Eric, about the games industry and setting up a company," says Paul. "When the writing was on the wall and I was asked to get involved, they didn't have to ask twice."

The emerging company – Warthog Games – certainly had strong foundations. Eric had run a successful business providing software, such as the animation and modelling packages Maya and 3DS Max to developers. Ash, meanwhile, was a serial entrepreneur who had run several software-based businesses. "Ash had his own artist and programmer in mind – Paul Jones and

» [Gizmondo] After being released for the PlayStation 2, Xbox and Windows, *Richard Burns Rally* pulled up on the Gizmondo.

RTHOG

» [PC] *Star Trek: Invasion* is a 3D shooter that had echoes of the *Colony Wars* and *Wing Commander* games, to a degree.

Derek Senior – while Nick and Phil pitched me as a lead programmer and Andy Whalley as an artist," says Paul. "Once we had everyone together, off we went: four artists, two programmers and a head full of dreams." They based themselves in the village of Cheadle, in Stockport, a half-hour's drive from Manchester.

"It was totally practical," says Paul. "Our office was owned by Ash's parents so we got cheap office space and pretty much every one of the eight people lived around that area, except me. It was only a couple of miles from Manchester Airport and a pretty central location." Warthog initially pitched a space combat game called *Zero Tolerance* around the industry but it was roundly rejected ("EA passed on it believing space games had had their time," Paul says).

Luckily, Erin and Chris at Digital Anvil had a huge multi-title deal with Microsoft. "They graciously put what we had in *Zero Tolerance* before Microsoft as a potential prequel to their ambitious Freelancer title," says Paul. "At that time we only had a neat technical demo, which was not overly ambitious but something we figured would be possible within the deadline we had set ourselves." Microsoft took the game on and it became the space flight simulator *Starlancer*. "Without a shadow of a doubt, it put us on the map and gave us much needed capital to build the company up."

Although *Starlancer* stuck to the same space theme as *Privateer 2*, the long-term plan was set to be rather different. "We wanted to get into the space of Disney-style games," adds Paul. "We saw them as being incredibly lucrative."

As such, the guys at Warthog Games drew inspiration from Traveller's Tales which had been founded in nearby Knutsford in 1989 by Jon Burton ("A man who, in hindsight, was a significant piece of the magic that we couldn't match because he was not only an adept programmer but incredibly savvy at business and pitches," says Paul). The developer had struck a deal to make games based on Disney's properties and it had also produced titles tied in with Pixar movies. "They were working with the best IP and they had a focussed team," Paul explains. "They were successful so that's what we wanted to do. We had to start with *Starlancer* because we had no reputation other than what the team brought to the table."

Starlancer sold around 400,000 copies, mainly on the PC (the game was also available for the Dreamcast). ▶

INSTANT EXPERT

- Warthog Games was founded by former staff from EA Manchester.
- **Well versed in making space games, the studio's first title was *Starlancer*.**
- The company was based in Cheadle, Stockport.
- **Warthog grew fast in the early Noughties, acquiring other developers.**
- At its height, Warthog had offices in Manchester, Texas and Sweden.
- **It also peaked at 250 staff.**
- Warthog focused on developing games on behalf of publishers, including Electronic Arts, Universal and Warner Bros.
- **It's biggest licence was arguably *Harry Potter And The Philosopher's Stone*.**
- Some less-scrupulous publishers strung Warthog along for months, burning through its cash coffers.
- **There was a 50 per cent drop in revenues and pre-tax loss of £9.2 million in 2003.**
- Warthog worked on *BattleBots* – based on the Comedy Central TV show – but it was cancelled.
- **Numerous other games ended up canned when Warthog was purchased by Tiger Telematics.**
- *Momma Can I Mow the Lawn*, which was intended for the PlayStation 2 but switched to Gizmondo, was also scrapped.
- **Gizmondo owner Tiger Telematics' buyout of Warthog saved it from imminent closure.**
- But when Gizmondo failed and Tiger Telematics filed for bankruptcy, what became Gizmondo Studios Manchester also closed.
- **Key staff formed Embryonic Studios which was acquired by TT Games.**

» [PC] Warthog created a number of racing games including *Rally Championship Xtreme* for SCI on the PC.

» [GBA] Warthog developed the GBA version of *Robot Wars Extreme Destruction* and it differed from the PC and Xbox versions.

TIMELINE

1997
- Ex-EA Manchester developers found Warthog.
- **Warthog works on a demo of space combat game *Zero Tolerance*.**

1998
- Following a deal with Digital Anvil, *Zero Tolerance* evolves into space sim *Starlancer*.

2000
- ***Starlancer* is released.**
- Warthog's first cartoon tie-in, *Tom And Jerry In House Trap* is released in the same year as another space sim, *Star Trek: Invasion*.

2001
- **Three *Tiny Toon Adventures* are developed and launched.**
- Warthog is floated on AIM.

2002
- **Warthog makes its first acquisitions, Swedish developer Atod and Zed Two.**

2003
- *Harry Potter And The Philosopher's Stone* is released in time for Christmas.
- **Fever Pitch is acquired for £183,000 and rebranded Warthog Texas.**
- The acquisition comes with the original games Johnny Whatever and Fallen Kingdoms.

2004
- **Warthog employs more than 230 people in its development team.**
- Warthog announces *Richard Burns Rally* for the Gizmondo handheld.
- **A month later, in November, Tiger Telematic buys Warthog.**

2005
- The Gizmondo handheld is finally released to monumentally poor sales.
- **Gizmondo Studios Manchester releases *Point of Destruction*, *Richard Burns Rally*, *Sticky Balls* and *Trailblazer*.**

2006
- Tiger Telematics forced into bankruptcy.
- **Warthog developers' new company Embryonic Studios is acquired by TT Games.**

▶ Paul shared lead programmer duties with Derek Senior and they worked on pretty much everything to do with the game from the engine to the gameplay along with Warthog's new recruit Kevin Ng – "A future superstar," says Paul. "After *Starlancer*, we started working on the Tusk Engine; a 'platform agnostic' set of tools and technologies," Paul continues. "Once we had teams working on multiple projects I ran the 'Tools 'n Tech' department, keeping the engine ship shape and working on as many platforms as possible."

Tusk was a robust piece of tech which abstracted developers away from the hardware, ensuring they didn't need to know the ins and outs of how the consoles worked, whether that be the GameCube or the PS2. "Devs just needed to know how to tell Tusk to position and animate an object and all of the low-level code would take care of behind the scenes," says Paul.

He says the killer feature was that it was a fully streaming engine which allowed for worlds as big as the developers could build. "This was back in 2000 and it was not limited by memory – the worlds would stream in and out on demand," Paul adds. "When we pitched for *Harry Potter And The Philosopher's Stone*, we had a fully streaming Hogwarts Castle which I think sealed the deal."

***Harry Potter and the Philosopher's Stone* was published by EA and it launched in 2003.** In the meantime, Warthog had achieved its dream of creating many games based on recognisable IP. "But we generally didn't get the big children's IP that Traveller's Tales went after," Paul says. "We got lesser-known titles but that's what was on the table and it was (mostly) paying work to keep the wolves from the door so we grabbed it with both hands." Titles included *Tom And Jerry In House Trap* for the PlayStation in 2000, a host of *Tiny Toon Adventures* in 2001 and a cel-shaded fighting game based on the *Looney Tunes* series called *Loons: The Fight For Fame* which was exclusively released for the Xbox by Infogrames in 2002.

"I personally enjoyed working on the children's titles and, within the confines of the licensor's properties, the

DEFINING GAMES

HARRY POTTER AND THE PHILOSOPHER'S STONE

■ This was a massive success on the original PlayStation in 2001, selling 3.73 million copies. It is fair to say, then, that its publisher EA had high hopes for the PS2, GameCube and Xbox versions two years later. Warthog was more faithful to the movie and sped up the loading times, but critics pointed out the liberal borrowings from another *Harry Potter* game, *Chamber Of Secrets*, and it was that too little money and time was available for the title. Despite that, this action-adventure is by no means a disaster. Fun and child-friendly, it had intelligent puzzles, and a world to explore.

STARLANCER

■ Warthog's experience in developing space-themed games was stellar, thanks to its creation of *Privateer 2* when the team was working at EA Manchester. So for its first game, the fledgling developer teamed up with Digital Anvil to bring first class, first-person, story-driven space combat to the PC and, later, the Dreamcast. The game went down a storm and it became loved for its varied mission goals, jaw-dropping graphics, superb sound effects and speedy combat. The game was also notable at the time for its fine attention to detail and the co-op option for the main campaign. Multiplayer was cut for the Dreamcast version, though.

> **"A lot of people absolutely killed themselves to meet the deadlines"**
> Paul Hughes

designers were free to create their own 'Mario-esque' titles," Paul enthuses. Yet *Harry Potter* lead to mixed feelings. "We went all out to secure that deal and we put together, in my mind, the best pitch we'd ever done," Paul recalls. "I was over the moon to be working with EA again and to be working on the biggest IP in the world. I really thought this was it.

"But it also very nearly broke me. A lot of people absolutely killed themselves to meet the deadlines on that project. We pulled it off, and I believe we produced an excellent game in record time for not a lot of capital outlay, but, boy, it took its toll. We lost a lot of brilliant developers after that project ended; it was just too much pressure to bear. Some people moved on, some left the industry entirely, a lot still carry the scar, so to speak."

Better times were had on other games, from Noughties *Star Trek: Invasion*, to *Rally Championship Xtreme* in 2001 and *Robot Wars: Extreme Destruction* in 2002. *Star Trek* sold more than 260,000 copies on PlayStation while work on *Rally Championship* led Warthog to acquire the videogame developer Atod which was based in Helsingborg, Sweden. It became Warthog Sweden. "That came about because we had started working on the *Rally Championship* titles for Actualize which had, in the past, worked with Atod," Paul says. "The exec management figured that having Atod as part of the Warthog family would help tie us completely into the ongoing *Rally Championship* brand which by then had been acquired by SCI."

Warthog had become a publicly listed company and it felt expanding its size would be regarded as a good thing by the stock market. Other acquisitions followed including Fever Pitch, which became Warthog Texas, and Zed Two, which John and Ste Pickford formed in 1996. Zed Two had become successful due to the puzzle game *Wetrix* and the brothers were based in Manchester. "John and Ste are two of the most game-savvy people you could meet," Paul says. "You had the code, the art and the raw designs. John really understands playability and Ste has the most profound visual eye for detail."

At the same time, Warthog continued to develop titles based on existing franchises. "Original titles were nigh-on impossible to get any traction on so it was far easier to develop a game concept and try to shoehorn it into a publisher's own IP," Paul explains. "We pitched for every IP under the sun, sometimes comically so." Successful titles ranged from *Battlestar Galactica* which was developed alongside VU Games, drawing on the designs of the original 1978 series, and *Looney Tunes: Back In Action*. Zed Two produced *Future Tactics: The Uprising* in 2004 for the GameCube, PS2 and Windows. A Gizmondo version was also planned.

"We churned out a lot of games, but was all of that output top-drawer intellectual properties? Not by a long stretch." asks Paul. "*Harry Potter And The Philosopher's Stone* made me think, 'We're here, we've made it,' but those moments were few and far between." Even so, Warthog had made a big impression on the industry and it was recognised for its undoubted talent. Tiger Telematics, the US-based parent of the portable console manufacturer Gizmondo, pounced in 2004 and Warthog sold all of its subsidiaries including

» [GBA] There were puzzles and cute characters galore in *Tiny Toon Adventures: Wacky Stackers.*

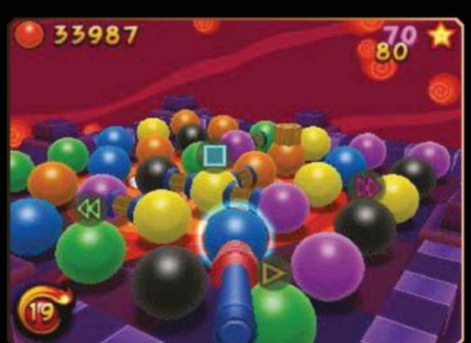
» [Game Boy Color] The side-scrolling platformer *Buster Saves The Day* is an average, albeit colourful, jaunt.

LOONEY TUNES: BACK IN ACTION

■ *Looney Tunes: Back In Action* was Warthog's biggest-selling game ("And the only game which ever got a royalty payment big enough to pass on to the team," says Paul Hughes). In this cartoon caper, you play as Bugs Bunny or Daffy Duck, using the characters' special abilities to solve challenges and overcome obstacles as they collected coins and made their way through each of the five levels. As well as imitating the movie of the same name, Warthog paced its platformer with slapstick humour, and it certainly appealed to young fans at the time. Its voice cast also includes the Warner Bros animation legend Joe Alaskey.

STICKY BALLS

■ Originally developed for Pocket PCs by Ste and John Pickford at Zed Two, *Sticky Balls* was earmarked for the PlayStation Portable until Tiger Telematics snapped up Warthog and switched the focus to the ill-fated Gizmondo handheld instead. As a result, Ste and Jon were made redundant and the newly named Gizmondo Studios Manchester picked up the development, releasing this tricky and compelling puzzler in 2005. Resembling a game of *Billiards*, the aim is to stick balls of the same colour together in the hope of getting them to a certain size in order to clear them. The game has also since appeared on the App Store iOS devices.



MACE GRIFFIN: BOUNTY HUNTER

■ As well as chasing work on recognised franchises, Warthog also worked on its own original ideas. *Mace Griffin: Bounty Hunter* is a futuristic, space-set first-person shooter, released in 2003 for the PS2, Xbox and Windows. But while the game lacks multiplayer and a gripping story (and also felt dated by the time it released) the game seamlessly and successfully merges ground and space combat. As such, it was, "A game that could have been something because it was Halo before *Halo*," as Paul Hughes explains. "Except it was so damn late and cost so much darn money that *Halo 2* was out before we shipped".

THE DNA OF WARTHOG GAMES

A TALENTED CORE

■ Artists and designers Nick Elms and Phil Meller, along with programmer Paul Hughes, formed a backbone at EA Manchester. Having worked on *Privateer 2: The Darkening*, they figured how to push each other's buttons and operate well together from their Cheadle offices. What's more, Nick, Phil and Paul along with Derek Senior and Andy Whalley stuck together at Warthog, Gizmondo, Embryonic and TT Fusion.

FAMILY-FRIENDLY GAMES

■ Warthog built up a relationship with numerous publishers including Conspiracy Games, SCi, NewKidCo, EA and Warner Bros Interactive but it played the field to a great extent. Its stock in trade was creating games based on well-known properties, such as *Looney Tunes* and *Harry Potter*, and it mainly sought to make games that it felt children would enjoy, hence the reason for the numerous cartoon-based licences it worked on.

PLAYSTATION POWERHOUSE

■ Although Warthog made games for the PC, Nintendo handhelds and the GameCube, most of its games appeared on the PlayStation and PlayStation 2. According to VGChartz, the biggest selling Warthog Game was *Looney Tunes: Back in Action* on the PS2 in 2003, with 500,000 sales. The best-rated, according to Metacritic, was *Star Trek: Invasion* on the PlayStation (76%).

WHERE ARE THEY NOW?

PAUL HUGHES

■ When Tiger Telematics acquired Warthog Games, Paul retained his position as Chief Technology Officer. He became the Technical Director and co-owner of Embryonic Studios, assuming the position of head of technology at TT Fusion when TT Games took over. He remained at TT Fusion for more than a decade working on a host of *Lego* titles from *Lego Star Wars: The Complete Saga* to *Lego Batman: The Videogame* and many more besides. He is now contemplating his next move within the videogame industry while working on a revamp of his personal website pauliehughes.com which is full of retro goodies.

STE AND JOHN PICKFORD

■ Ste and John remained joint managing directors of Zed Two until February 2004 when they formed the independent online publisher Zee-3. It became home to brothers' original videogames and comics and among their greatest recent successes was *Magnetic Billiards*. They have also produced an iOS version of *Naked War* and an excellent *Plok* comic strip.

NICK ELMS

■ Nick had been the VP of art at both Warthog and Gizmondo Studios Manchester but he became creative director at TT Fusion and remained with the company until 2013. He took the position of creative director at Cloud Imperium Games, a company founded by Chris Roberts in 2012 and based in Wilmslow, Cheshire. Erin Roberts joined the firm – which is behind the first-person universe space sim, *Star Citizen* – in 2013.

ANDY WHALLEY

■ Like Paul, Andy Whalley – who honed his talent on games such as *Harry Potter And The Philosopher's Stone* – progressed through Warthog Games, Gizmondo Studios Manchester and Embryonic to TT Fusion where he remains to this day as a lead character artist. His latest creation is The *Lego Ninjago Movie Video Game* which was released in 2017 for the PS4, Xbox One, Nintendo Switch and Windows.

> **"When our bills stopped being paid, that was a big clue something was going wrong"**
> Paul Hughes

▶ Sourcery Developments, Infogrames' Manchester development studio, Zed Two, Atod and Fever Pitch.

"To be honest, they bailed us out," remembers Paul. "We were on the bones of our arse and had gone from a company with a market value of £150 million to a company with a $2 million value that sold out for £14 million in just two years. We took what we were given." As part of the deal, Ash Hall and two other executive directors of Warthog, Steven Law and Simon Elms, took up senior roles at Tiger Telematics. But why did the company want to buy Warthog, exactly? Well, it simply needed a steady stream of first-party titles for the Gizmondo handheld which was due to be released in March 2005.

The Gizmondo was launched with promise. Many A-list stars gathered at London's Park Lane Hotel, pulling up in majestic limousines and fast cars. They included Sting and Jamiroquai frontman Jay Kay and the bash was as rock and roll as you could imagine with free alcohol flowing and the handheld centre stage. The company gained a reputation for big salaries and a lavish working life. The actual machine had a 2.8-inch LCD screen, left and right shoulder buttons, an eight-way directional pad and four buttons for play, rewind, forward and stop which was handy for its MP3, video camera and in-car navigation features.

Powered by an ARM9 400 Mhz processor and Microsoft's Windows CE.Net, the handheld had suffered a bit of slippage but there were plans to ship 25,000 units at its launch. Warthog – now renamed Gizmondo Studios Manchester with Warthog Texas becoming Gizmondo Texas – was told to focus its attention on producing games for the handheld. This led to mild panic at Sony. "We had the first PSP dev kit outside of Sony because it was into *Sticky Balls*, a Zed Two property," recalls Paul. "Not unsurprisingly, the second we sold to Gizmondo, Sony came knocking on the door to take its hardware back. *Sticky Balls* on PSP is probably one of the best PSP games no-one ever played."

The game was, however, released on Gizmondo ("A poor relation of what we had on the PSP but it was the best that the hardware could achieve"). Paul just wishes Warthog has gotten on board earlier: "I think we all thought the product itself was a good idea but the hardware was just ill conceived. By the time it had evolved into a games console it was too late to change the engineering decisions that had been made so when we came on board with a bunch of external developers we could all see the ingrained flaws. If anything, the experimentation we did – particularly within the TNT group – was putting together presentations on how to drive the hardware as optimally as possible (which was no mean feat). We had already been working on

» [PS2] Mace Griffin was introduced in the FPS *Mace Griffin: Bounty Hunter* released in 2003.

» [PS2] Despite being at an advanced stage of development, THQ pulled the plug on *BattleBots*.

THE TUSK ENGINE

■ Paul Hughes says Warthog was confident in the products it was working on although it often felt like a race to the bottom to get publishers to commit money. It certainly helped that the five-strong 'Tools 'n Tech' department made a top-performing game engine that supported multiple projects on multiple platforms. "I think we did an unbelievable job," Paul says.

MANY ACQUISITIONS

■ Warthog was in such a strong position in the first three years of the Noughties that it acquired a host of developers – such as Atod, Zed Two, Fever Pitch Studio and, perhaps rather oddly, a 15-strong development team from Infogrames. That particular deal, which was finalised in 2001, came complete with hardware assets and the rights to finish off the 2002 *Looney Tunes* game *Loons: The Fight for Fame*.

GIZMONDO GRIEF

■ The decision to make games for the Gizmondo handheld led to Warthog Games being snapped up by the console's parent company Tiger Telematics. It then became entirely focussed on titles for the machine. A port of the racing game Trailblazer by Gizmondo Studios Manchester was the only UK launch game but more titles eventually arrived until Tiger Telematics' debt and poor sales led to bankruptcy.

» [PlayStation] Warthog aimed for the kids market and it did so by pitching for the rights to make games like *Tom And Jerry In House Trap*.

» [PC] *Battlestar Galactica* features the voice talent of Dirk Benedict who played Lieutenant Starbuck in the original TV series.

a PSP title and we knew by then that PSP blew Gizmondo away."

Among the games created by Gizmondo Studios Manchester were *Point Of Destruction*, *Richard Burns Rally*, *Toy Golf* and *Trailblazer*. Only 14 games were released for the console in total, however, as it hit problems at an early stage. That was a major blow for Gizmondo Studios Manchester given 89 titles had been planned by the end of 2005 but there appeared to be little appetite for the machine. Tiger Telematics tried to position it entirely as a GPS, even going as far as striking a deal with Ford. On the eve of the US launch, Gizmondo's chief executive Stefan Erikson resigned. The debt spiralled to $210 million.

"There had been some extravagant spending going on, so everything appeared fine; money was no problem," says Paul. "But when our bills stopped being paid overnight, that was a big clue something was going wrong! External developers started complaining of invoices not being paid. Then the hardware guys had missed payments, and finally our salaries started being paid late; at this point we started looking into the finances a little more forensically and realised things were not as they seemed – pensions hadn't been paid. The break was a newspaper article in Sweden that the lads at ATOD translated and faxed over to us alleging all kinds of impropriety. Suffice to say panic set in!"

Gizmondo had begun laying people off. "But they kept a small handful of us on to try and keep things ticking over until things could be resolved (whatever that meant)," says Paul. "So during this time, a few of the guys had gotten together to try and set something else up in the background. That became Embryonic Studios. Once Gizmondo finally went down in flames and we'd literally shut up shop with the receivers, we all pitched in and joined up with that group of the original Warthog developers and became part of Embryonic Studios. It felt like the proverbial phoenix rising from the flames; it was scary going it alone again, but we'd all done a lot of pitches, we all had lots of contacts and it wasn't long before we had paying contract work going again."

Gizmondo Europe went into administration in 2006. Meanwhile, Embryonic Studios caught the attention of Traveller's Tales – or TT Games as it had become. Following a swift takeover, Embryonic became TT Fusion, tasked with developing console and handheld titles. "Our Tusk engine also lived on because we bought the rights for it from the receivers when we formed Embryonic Studios and we continued to develop it into the Fusion engine." Paul went on to work with the *Lego* franchise at TT Games. He has no regrets.

"What made Warthog, certainly in the early days, was the original crew just loved working together," he says. "We gave a damn about not only our product, but the people too. Did we do everything right? No, in honesty we failed more than we succeeded. But as the years went by, we learned from the many mistakes of Warthog and we tried our best to do things right as Embryonic evolved into TT Fusion. Running a games company is no picnic but I'm glad we did it."

PITCHING IN

■ Warthog's main trade was in seeking contracts from rights holders and publishers to produce games based on recognised names. But how they made their approach would differ from game to game. "Some were well planned and some were, well, last minute," laughs Paul Hughes, Warthog's Chief Technology Officer.

"For example, we pitched to take over *Spyro The Dragon* on the next-generation consoles, so the PS2, GameCube and Xbox, and we put together a slick design presentation which came as a beautiful illustrated children's storybook that we had printed.

"But on the other side of the coin we had 48 hours to pitch for *The Hulk*. We quickly modelled Hulk and had a walk cycle animated and then had him running around on the deck of the *Battlestar Galactica* which was a project we were working on at the time. It was a demo of our prowess but it looked utterly ridiculous. We got neither project signed."

ESSENTIAL GAME

Super Smash Bros Melee

The competitive community surrounding this crossover party fighting series is notoriously picky about equipment. Playing *Melee* on anything other than a CRT television is blasphemy, and GameCube controller support is so essential that the Wii U version of *Super Smash Bros* was accompanied by newly manufactured pads and an adaptor to use them. One prominent player even dropped out from a *Melee* tournament in 2017 because he couldn't find a controller that was malfunctioning in a way that suits his technique. Some might say that this is all a bit ludicrous, and they'd probably be right – but *Melee* die-hards won't be swayed.

GameCube Controller Fact

■ The first public images of the GameCube controller were actually of a prototype – it featured a blue A button, a green kidney-shaped B button, a flatter Z button and a larger red, rounded Start/Pause button.

GameCube Controller

» PLATFORM: GAMECUBE **» RELEASED:** 2001 **» COST:** £24.99 (LAUNCH), £15+ (TODAY)

Following the weird and experimental N64 controller, Nintendo's GameCube offered a more traditional pad that still had some idiosyncratic features as compared to the competition. The layout was similar to existing pads – like the PlayStation 2's DualShock 2, it offered two analogue sticks, a D-pad and four main face buttons, though like the Xbox controller it positioned the left analogue stick as the primary input. Like the Xbox controller, it offered two analogue shoulder triggers, which offered a satisfying click at maximum pressure. However, each feature had its own quirks – for example, the D-pad was tiny and the right analogue stick was a nub instead of a proper thumbstick. The face buttons are irregularly proportioned, with a giant A button, a small B button and kidney-shaped X and Y buttons. And then there's the choice to have an extra shoulder button, but only on the right side of the pad.

All of this oddness meant that the GameCube controller was best suited to GameCube exclusives, with multiplatform third-party games often feeling odd – particularly fighting games. Yet the controller remains popular due to its compatibility with subsequent Nintendo systems, as the Wii supported it natively and the Wii U via an adaptor.

WRESTLING GAMES

Wrestling games aren't exactly hard to come by, unless you want something a little different from the usual WWE fodder. Luckily, resident rasslin' enthusiast Nick Thorpe is here with a full stable of alternatives…

GIANT GRAM 2000: ALL JAPAN PRO WRESTLING 3

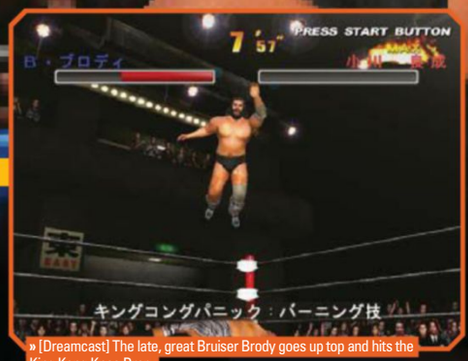
■ PLATFORM: **DREAMCAST** ■ DEVELOPER: **WOW ENTERTAINMENT** ■ YEAR: **2000**

■ **It's not easy being a wrestling fan.** The constant questioning of your intelligence ('You *do* know it's not real, *right?*') is one thing, but the struggle to find good stuff to watch is more troublesome. Sure, you'll get great matches in WWE and even the smaller American companies, but you're missing out on a lot if you don't look at Japan, and that's always been true. While New Japan Pro Wrestling has been dominant in recent times, All Japan Pro Wrestling was once a force to be reckoned with – and so were quite a few of its games.

Giant Gram 2000 is the last and best entry in Sega's *All Japan Pro Wrestling* series, and like its predecessors it was originally an arcade game. As a result, the game is relatively fast-paced and has a control system that is easy to grasp. Being based on Japanese wrestling, it's somewhat heavy on striking, too. What's great about *Giant Gram 2000* is the fact that as well as featuring a responsive, enjoyable fighting system, the moves look like they hurt. When someone lands a particularly damaging move, the screen's colour palette will go negative with a great big clanging sound to signify injury – it's a great touch.

Arcade mode is the primary play option, in which you battle through a series of single or tag team matches on the way to a grand championship showdown in a huge venue. It's well presented, with all of the traditional pageantry including entrance music and streamer-throwing fans, but it wouldn't be enough on its own. Thankfully, the home game has some cool extras over the arcade release. The now-mandatory Create A Wrestler mode is in there, although the options are certainly a bit limited when compared to other games of the time. More fleshed out is the History mode, in which you're required to recreate 24 classic bouts in order to unlock video clips of the actual matches.

There's a large roster on offer, with 31 initial wrestlers and 14 more to unlock. As this is based on a Japanese promotion, the wrestlers featured are primarily Japanese stars such as Giant Baba, Kenta Kobashi, Mitsuharu Misawa and Jun Akiyama. However, there are some names in there that Western fans will recognise instantly – Vader is arguably the most well known to modern fans, but the likes of Johnny Ace (better known as John Laurinaitis), Mike Barton (the WWE's Bart Gunn), Stan Hansen and Dr Death Steve Williams all feature. The game also contains some legendary figures, including Rikidozan, Jumbo Tsuruta, Bruiser Brody and Bruno Sammartino. Even Wolf Hawkfield of *Virtua Fighter* shows up for a scrap, as Sega was sponsoring a wrestler to don the gimmick at the time.



» [Dreamcast] The late, great Bruiser Brody goes up top and hits the King Kong Knee Drop.

Dreamcast-owning wrestling fans outside of Japan at the time had to put up with the likes of *ECW Hardcore Revolution* and *WWF Royal Rumble*, and frankly you'd feel like a total jabroni if you'd bought those knowing that something as excellent as *Giant Gram 2000* was out there instead. It's cheap, it's mostly import-friendly (and guides are out there for the tricky bits), and it's a damned fine professional wrestling game.

IN DEPTH

RUNNING ON FUMES

■ Your wrestler's life bar is an indicator of how likely they are to submit or kick out of a pin. Even at zero life, you can continue to fight as long as you don't get pinned.

HIGH IMPACT

■ If you hit a particularly damaging move, you'll injure the opponent. This is indicated by this negative effect and a graphic showing what got hurt – in this case, the neck.

GOING BROADWAY

■ There's a time limit on every match, so you'll have to pin your opponent quickly – there are no draws so running out of time means that the match is awarded to the player with more life.

BURNING HAMMER

■ Both dishing out damage and receiving it will build your Burning gauge. Once at maximum, you can activate it to enable your finishing move, as well as to kick out of pins.

IF YOU LIKE THIS TRY...

ALL JAPAN PRO WRESTLING FEATURING VIRTUA

ARCADE

■ The first entry in Sega's *AJPW* series isn't as refined as its younger sibling, but it's got Jeffry from *Virtua Fighter* in it and that's a good thing. It's also quite an attractive game, with well-animated characters and a silky 60fps presentation.

WWF WRESTLEMANIA: THE ARCADE GAME

ARCADE

■ Midway's take on the New Generation era of the WWF goes bonkers and dispenses with reality. Projectiles are no problem, Razor Ramon's arm turns into a literal blade, and The Undertaker will actually crack a tombstone over his opponent's head.

SATURDAY NIGHT SLAM MASTERS

ARCADE

■ Even if you don't like wrestling, it's not hard to get into *Saturday Night Slam Masters*, as the game is accessible and fun – and you can be *Final Fight*'s Mike Haggar. Metro City's mayor happened to have been a pro wrestler once upon a time.

Minority Report

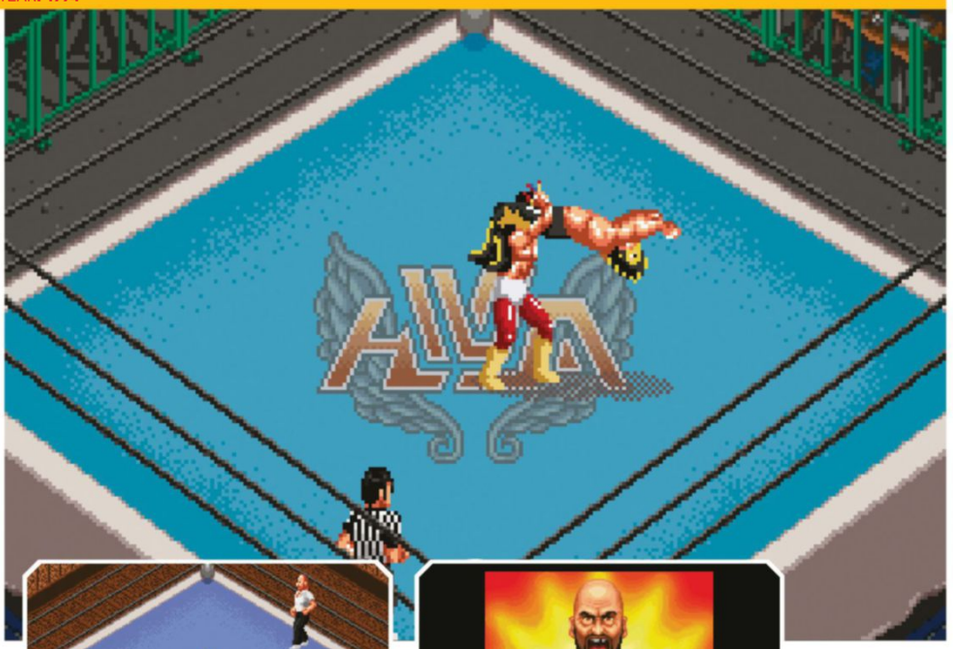
SUPER FIRE PRO WRESTLING SPECIAL

■ PLATFORM: **SNES** ■ PUBLISHER: **HUMAN ENTERTAINMENT** ■ YEAR: **1994**

■ **The *Fire Pro Wrestling* series is a staple amongst serious fans of wrestling games as it boasts a number of great games across a variety of formats, from the brilliant SNES games through the Dreamcast's *Fire Pro Wrestling D*, right up to the modern *Fire Pro Wrestling World*.** This is all the more impressive as the series has remained steadfastly 2D in spite of changing trends. However, the enduring popularity of the games is easily explained – they frequently include the best character creation tools and the most varied match stipulations.

The game system takes a little getting used to, coming from other games. Moving your wrestler close to an opponent will initiate a grapple, and your goal is to time your move's input closely to the moment when the wrestlers clasp hands. It's crucial to follow the flow of an actual match, too – you'll start off with simple techniques like snapmare takedowns and strikes, and progress to more powerful powerbombs, suplexes and the like. Attempt a powerful move too early and your opponent is likely to reverse it to his own advantage.

Super Fire Pro Wrestling Special is obviously dated compared to the games that followed it, but it remains infamous in Japan for its Champion Road story mode, which was penned by *Killer7* and *No More Heroes* director Goichi Suda (AKA Suda51). Touching on the sacrifices wrestlers make, your protagonist loses his girlfriend and accidentally kills one of his friends in the ring. By the end of the story, having gained championship gold but lost every relationship he held dear, your character commits suicide in his own home just days after his victory. It's dark, to say the least.



» [SNES] In the early stages of the story, your matches take place in this lowly training dojo.

» [SNES] The story of the game is told entirely in Japanese, but animated scenes help to convey the events.

MORE GAMES TO PLAY

» AJW: QUEEN OF QUEENS

■ DEVELOPER: **NEC**
■ PLATFORM: **PC-FX** ■ YEAR: **1995**

■ This oddity allows you to pit All Japan Women's Pro Wrestling stars against one another via the medium of FMV. The game starts from a standing sequence during which players input moves, causing a video sequence to play. However, you're limited by stamina, so your opponent will also get moves in. The design plays to the strengths of the console, but you rarely feel in control.

» WWF BETRAYAL

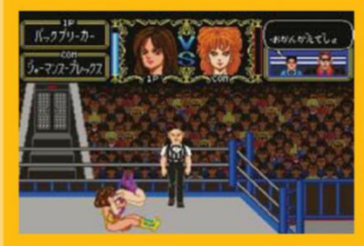
■ DEVELOPER: **WAYFORWARD TECHNOLOGIES**
■ PLATFORM: **GAME BOY COLOR** ■ YEAR: **2001**

■ Stephanie McMahon has been kidnapped, and it's up to you to rescue her – that is, if you ever want another title shot. To do so, your choice of Stone Cold Steve Austin, The Rock, Triple H or The Undertaker must embark on a beat-'em-up journey. The game is a bland effort that relies primarily on the licence and some occasionally pretty graphics, so we'd leave Stephanie to her fate (though to be fair, we'd do that anyway).

» LEGENDS OF WRESTLING II

■ DEVELOPER: **ACCLAIM STUDIOS SALT LAKE CITY**
■ PLATFORM: **GAMECUBE** ■ YEAR: **2002**

■ After losing the WWF and ECW brands in quick succession, Acclaim turned to gaining the likeness rights to unaffiliated wrestling legends. The PAL versions actually feature *World Of Sport* legends Big Daddy, Giant Haystacks, Kendo Nagasaki and Mick McManus, so you can see how they'd fare against Hulk Hogan and Rowdy Roddy Piper.



» CUTIE SUZUKI NO RINGSIDE ANGEL

■ DEVELOPER: **COPYA SYSTEM**
■ PLATFORM: **MEGA DRIVE** ■ YEAR: **1990**

■ You might have seen Cutie Suzuki during her WCW appearances in 1995, and she was a big star in Japan's JWP promotion through the Nineties. This licensed game is roughly on par with the WWF's output of the time, with some cool moves available. It's rough to look at, though – you'd hardly believe it was a Mega Drive game that came out at the same time as *Castle Of Illusion*.

EXTREME WARFARE REVENGE

■ PLATFORM: **PC** ■ PUBLISHER: **ADAM RYLAND** ■ YEAR: **2002**

■ **At some point, we've all watched a wrestling show and wondered, "Who booked this crap?"** This perennially popular freeware wrestling management simulator gives you the chance to unleash your inner McMahon, Heyman or even Russo and see if you can do better. You're given total control over the running of your promotion, from hiring and firing staff members to scripting shows, working with sponsors and approaching television networks.

Similar to a football manager game, each wrestler has statistics that govern their performance in various types of matches and angles, as well as individual salary demands and friends. Your key job is to book shows which employ them in interesting matches and feuds, weaving in interview segments, backstage attacks, sneaky heel turns and more. After each show, a wrestling columnist rates your segments on quality and crowd reaction.

The default data in version 4.0 dates from around 2004, and although the game doesn't carry any official licence, you can take the helm at a variety of promotions with accurate rosters. These include the WWE behemoth, big indies like NWA: Total Nonstop Action and Ring Of Honor, and even tiny upstarts. There's no set goal, but we like to take small promotions and try to overtake the WWE. Fans have also kept the game updated over the years, so if you'd prefer to manage AJ Styles and Samoa Joe in WWE rather than TNA, you can.

» [PC] Sabu refused to lose this match, so we had to have Abyss attack afterwards to gain some heat.

RETRO SUNKEN

» WCW BACKSTAGE ASSAULT

■ PLAYSTATION ■ KODIAK INTERACTIVE ■ 2000

■ *WCW Mayhem* wasn't a brilliant game, so we're pretty baffled as to why EA thought that a sequel with inferior visuals and no in-ring action was a good idea.

» ROCK'N WRESTLE

■ DEVELOPER: **MELBOURNE HOUSE**
■ PLATFORM: **COMMODORE 64** ■ YEAR: **1985**

■ While the animations aren't the smoothest, it's impressive just how many realistic wrestling techniques Melbourne House could pack into this C64 game. Sure, everyone wears a singlet, but there are enough head swaps and colour palette changes that it doesn't look a world apart from actual mid-Eighties wrestling. Plus, we like Angry Abdul and are kind of hoping that he's related to WCW alumnus Kwee Wee/Angry Allan.

» VIRTUAL PRO WRESTLING 2: ODO KEISHO

■ DEVELOPER: **ASMIK/AKI**
■ PLATFORM: **N64** ■ YEAR: **2000**

■ This N64 game is another that uses the All Japan licence, and one which AJ Styles once proclaimed to be the best wrestling game ever made. The game uses the same engine as *WWF Wrestlemania 2000*, but omits the new gimmick matches. Instead, it offers an expanded wrestler creator and a unique grappling system for the MMA fighters.

» TITLE MATCH PRO WRESTLING

■ DEVELOPER: **ABSOLUTE ENTERTAINMENT**
■ PLATFORM: **ATARI 2600** ■ YEAR: **1987**

■ As a late effort on the Atari 2600, this game looks decent and offers a surprising number of wrestling moves for you to perform on a limited control stick. You can even choose between four fictional wrestlers! However, it's only really worthwhile for multiplayer fun, as the computer opponent is so difficult that you'll suspect that he's based on a very angry Brock Lesnar – you'll be pinned before you know it.

» RUMBLE ROSES

■ DEVELOPER: **YUKE'S**
■ PLATFORM: **PLAYSTATION 2** ■ YEAR: **2004**

■ This PS2 game features a variety of fictional female wrestlers, and trades very heavily on sex appeal – the camera is always close up so you can get a good view of the detailed character models grappling. The game is actually rather well constructed, but offers little long-term appeal beyond the story mode. That said, we like the fact that the wrestlers all have different gimmicks depending on whether they're face or heel.

THE MAKING OF Kingpin LIFE OF

In the summer of 1999, violence in videogames was a hot topic. So what happened when the most controversial title of the decade geared up for release? Edward Love investigates

» Viktor Antonov designed *Kingpin*'s gritty environments. Here he is appropriately posing with a knuckle duster.

If you had any interest in PC games in the late Nineties, chances are you caught wind of *Kingpin: Life Of Crime* by Xatrix. It centred on a gangster hellbent on ascending the underworld to enact out vengeance to the organisation that left him for dead, set in a stylised Art Deco world. With guns and gore and colourful language in plentiful supply, the demo was prized contraband for any teenager.

Two months before *Kingpin* shipped, however, the Columbine High School massacre took place. The crime was so senseless, so inhumane, that it was necessary to find a scapegoat, and videogames were put on trial by the media.

Kingpin limped to market in June of 1999 bearing its battle scars, buried beneath a battalion of Parental Advisory stickers. Dan Koppel was technical lead and senior level designer on the project, and he remembers the climate of the time. "Originally, Best Buy were keen to stock us. They had seen the game at E3 and were excited, so they met with our producers and publisher and made their interest clear." The deal was simple: developer Xatrix would bleep out profanity but offer up an uncensored version available for download. "And then Columbine happened and Best Buy didn't touch us." Other retailers followed suit – a shame, because nothing in *Kingpin* is overly gratuitous and the storm of controversy that engulfed it only served to shroud an ambitious game. It was a rare breed of shooter that did more than simply give you guns to shoot and platforms to jump on.

» [PC] This is you. A charming fella, as you'll come to learn.

First, to understand how *Kingpin* was made, let's rewind to two years before its debut. In 1997, Xatrix releases *Redneck Rampage*, a colourful shooter with a flavour all its own. It's a middling critical success but it catches the attention of id Software, which wants a team to develop *The Reckoning*, a *Quake II* expansion. Xatrix signs on and begins working with an software engineer named Ryan Feltrin. Ryan, as it happens, has devised something

IN THE KNOW

- **» PUBLISHER:** INTERPLAY
- **» DEVELOPER:** XATRIX
- **» RELEASED:** 1999
- **» PLATFORM:** PC
- **» PLATFORM:** FIRST-PERSON SHOOTER

KINGPIN 101

■ Crime thriller FPS *Kingpin* was possibly the first game of its kind to use coloured directional lightning and it further benefited from the outstanding worldbuilding acumen of Viktor Antonov. But it wasn't without its quirks. One problem stands out. Character models interact with light oddly, meaning their skins wobble under illumination or, as Dan Koppel puts it, "Look as if they're covered in water."

KINGPIN

CRIME

rather novel: a system by which a player in the *Quake* engine can go up to an AI-controlled space marine, recruit him, and have the marine follow them around the map. The feature never comes to pass in the final game. Instead, Xatrix enlists Ryan to work on its own title.

Kingpin goes into production. The earliest idea is to have urban warfare take place between factions, all in 3D, using the *Quake II* engine. But this scope is overly ambitious. Xatrix doesn't have the time, the necessary team members or the technology to make it happen. Dan and his team concentrate on funnelling the player through linear levels instead and broadening the scope in carefully-curated explorable hubs.

Ryan's contribution is invaluable, however. "We would give Ryan the levels and suggest ideas for what we wanted the AI to do," Dan remembers. "Then we'd go to sleep and in the morning, Ryan's work would be waiting to be integrated." *Kingpin* has a level of openness and freeformity that stands tall next to the me-too QTE shooters as a result.

Even today, *Kingpin* is impressive. The game opens in Skidrow, a graffiti-strewn neighbourhood populated by thickset goons in trouser braces and gals wielding lead pipes. Bright fires

» [PC] The wonderfully-named Pawn-O-Matic pops up throughout the game, letting you buy upgrades and armour.

dance in grimy trash cans. Streetlights illuminate swathes of impersonal concrete. And the interplay between light and dark is stunning. The sewers nearby are your destination, but they're patrolled by the same group of goons that left you for dead. Near your starting point, you can buy a crowbar for a dollar or hire another thug for $10, but you need to find the cash first. The gloriously named 'Pawn-O-Matic' sells the good stuff: pistols, shotguns and even weapon mods too. The proprietor of Pawn-O-Matic will give you a pistol if you run an errand for him, and so begins the *Kingpin* experience. A trio of pleasures that cover shooting, conversing and even sneaking. This is a formula cut from traditional FPS cloth and flipped on its head, with

later hubs springing up in the guise of nightclubs and off-colour haunts. Nowhere in *Kingpin* is as gripping as its opening level, but it reminds one of a time when shooters weren't groaning under the weight of quick-time events and scripted sequences.

Dan Koppel would later work on *Call Of Duty*, a franchise that made the scripted sequence its signature. In the Noughties, AI programmers like Ryan Feltrin would take on less and less of the workload. Instead, team members called 'scripters' picked up the baton. They then worked closely with the art department to set a scene in concrete. "The ▶

» [PC] Enemies in the game leave a trail of blood when wounded, or can be sliced up entirely. That didn't go down too well with authorities.

WEAPONS MASTER

How To Beat Up Kingpin's Scum

LEAD PIPE

■ The lowly lead pipe is your starting weapon, but it's about as useful as a slap across the cheek. You'll need better gear, and fast.

PISTOL

■ The pistol looks the part and will certainly dent the flesh of your early foes, making it a godsend when lead starts flying further down Skidrow.

SHOTGUN

■ Meaty, concussive and good fun, the shotgun will be your gun of choice for much of the campaign. You can get this from any Pawn-O-Matic.

HEAVY MACHINE GUN

■ The HMG fires short bursts of bullets in bunches of threes. Be sure to invest in the cooling mod to render it even more powerful in battle.

BAZOOKA

■ You'll have a chance to wield the bazooka/rocket launcher from Moker Shipping two-thirds of the way through the campaign. Let it rain.

CROWBAR

■ For a dollar, you can pick up the hardier crowbar, but you can filch one from a hole behind your starting point in the opening of the game.

SILENCED PISTOL

■ Your handgun can be outfitted with three different mods acquired at the Pawn-O-Matic. Our favourite? The silencer, of course.

TOMMY GUN

■ You'll graduate to the Tommy Gun, which combines rapid rate of fire with a decent level of damage. Ideal for spray and pray at long range.

GRENADE LAUNCHER

■ Now we mean business. This hardy killing machine holds three grenades and can make mincemeat of any goon foolish enough to stray into your path.

FLAMETHROWER

■ The Big Daddy, this flamethrower is simply ace. It spits jets of fire that leave onrushing enemies covered in a halo of bright orange flame.

art department in a *Call Of Duty* game got really involved," Dan notes. "They would say things like, 'We want the player coming this way so we can script a plane crash, or an explosion.' You see a lot of that in games today." The difference between *Kingpin* and a *Call Of Duty* is striking: the former prioritises player agency while the latter champions a more filmic, controlled feeling.

» [PC] Kingpin's principal baddie is clearly inspired by Marsellus Wallace from *Pulp Fiction*.

***Kingpin*'s urban aesthetic is unique. Part-steampunk, part-Art Deco, the world is an anachronism of eras and locales and personalities.** To achieve this signature balance, Xatrix didn't have to look far. Viktor Antonov was already stationed inside the bullpen at Xatrix HQ, a 20-something artist who had trained under Syd Mead (*Blade Runner* and *Aliens*). "I'm fascinated by urbanism. I've lived in Sofia, Geneva, Los Angeles, Seattle, Austin Texas, I've been all over the place," Viktor notes. "Authorship is questioned in games, but someone has to bring something to the table from their own experience. Think Scorsese: his best movies have always been about his own neighbourhood. Everything I've done has been cities and metropolises.

» [PC] Expert a stern challenge. *Kingpin*'s difficulty level is pretty punishing and not for the faint-hearted.

"In *Kingpin*, we wanted to do a universe," Viktor elaborates, "but we ended up doing one city. You had your downtown area, your poison city, your sewers, your club, your shipyard. It was very much like a genre movie. The inspiration started with downtown LA, and then we added a little bit of steampunk and science fiction.

"One of the things that I have found useful in my contribution to the medium is that I'm not a hardcore gamer," Viktor says. "So in *Kingpin*, I wanted the lighting to be right, the architecture to be right. And the physical space of the cities to be right first and foremost. Then the rendering… if it was too sharp and neat it wouldn't work. I wanted to create a real moody ambience."

Kingpin shook off some of its early sci-fi traits when Cypress Hill came calling. The rap group loved the urban environments and signed on to do the score, but it necessitated that *Kingpin* take place in a world that more resembled our own. The partnership was mutually beneficial, but not necessarily the right artistic choice.

THE INFLUENCES OF KINGPIN

What the team used to inspire its unique world

URBANISM

■ "I've lived in cities all my life," Viktor Antonov says. "For *Kingpin*, we went to downtown LA and took pictures for references. You get on a plane, you go somewhere you've never been before, you get off the plane there's this impact of light, colour, smells and architecture that hits you in the face. That's what I was trying to bring."

HOLLYWOOD

■ CEO Drew Markham was influenced heavily by his two favourite films: *Pulp Fiction* and *The Big Lebowski*. Play *Kingpin* today and you'll spot numerous references to both; some subtle, some overt. Dialogue and even characters are directly based on the aforementioned movies, including two major boss characters.

> **"I probably didn't go home, and I didn't live that far away"**
> Dan Koppel

In the lead up to the 30 June launch, the team had crammed six months of work into two. Dan Koppel laughs when he remembers. "I probably didn't go home, and I didn't live that far away. I still remember one Saturday where I said, 'I just can't, I can't be in the office on a Saturday,' and I showed up on Sunday and Drew Markham, Xatrix's CEO, was like, 'Where were you yesterday?' I replied, 'I had to do laundry,' and he was like, 'Shit man, I can get you a maid to do laundry.' That wasn't the point! I wanted to see my wife!"

Though many retailers were put off by Kingpin post-Columbine, critics took note. Viktor Antonov's world-building drew considerable praise. Dan Koppel's level design was lauded. And on GameSpot.com, Erik Wolpaw wrote that Ryan Feltrin's AI was "exemplary and easily outshines the similar presentation in *Half-Life*".

"Ah, *Half-Life*. Was I jealous of it? Just a bit," Dan Koppel admits. "They did a better job of telling a story. Back then, it was a struggle to make a good story in an open environment." *Kingpin* is certainly half-baked at times, with contrived boss battles serving as chapter end points and a story that's wafer-thin. But what it does better than most Nineties shooters is establish a sense of place. Dan Koppel believes a lot of credit deserves to go to Drew Markham, the fiery CEO who conceived the game and brought, "A lot of ideas that we managed to make happen. That's probably why a lot of us in the team worked out so well: lots of developers have great ideas, but actually executing them is a different story."

The legacy of *Kingpin* is, in hindsight, one of ignominy. Xatrix would go on to develop *Return To Castle Wolfenstein* as Grey Matter. What became of Xatrix CEO Drew Markham is a mystery. His last gaming credit was 2005's *Cold Winter* and he has fallen off the radar since.

Dan Koppel went to work for Raven before leaving the games industry behind, bound instead for the world of data science and healthcare. Viktor Antonov is something of gaming royalty today. He was headhunted by Valve after *Kingpin* and then became visual design director of ZeniMax. He's now stationed at Darewise, which creates high-level concepts and then hires teams to execute them. It's a model of executive production that the golden age of Hollywood championed in the Sixties. Ryan Feltrin continues to lend his talents to the videogames industry.

Kingpin wasn't perfect. It wasn't even the game Xatrix originally set out to make. But in many ways it's a formative first-person shooter that deserves to secure a place in the pages of gaming history. Its vision paved the way for successors to build on its strengths. And it's still quite unique to play; a blending of genres and playstyles with ambition in spades. Not bad for a game about beating thugs to smithereens.

» [PC] The world is all impersonal steel and cold metal.

DEVELOPER HIGHLIGHTS

CYBERIA
SYSTEM: PC, VARIOUS
YEAR: 1994

REDNECK RAMPAGE
SYSTEM: PC, MAC
YEAR: 1997

RETURN TO CASTLE WOLFENSTEIN (AS GRAY MATTER) **(PICTURED)**
SYSTEM: PC, XBOX, PLAYSTATION 2
YEAR: 2001

DREW MARKHAM

■ He was known as a fiery and divisive force within the walls of Xatrix, but *Kingpin* was very much Drew's own idea. Dan Koppel remembers that he didn't suffer fools gladly, and he had the drive and ambition to ship *Kingpin* even when it didn't ultimately conform to his earliest vision.

RAP CULTURE

■ Antonov originally wanted to push the science fiction envelope for *Kingpin*, and create a more futuristic world. But then hip hop group Cypress Hill signed on to do the score and Xatrix was forced to tone down the otherworldly, settling on a milieu that was at home in the worlds of gangster rap culture.

OPEN-WORLD GAMES

■ "*Fallout* was the type of game I wanted to make," says Dan Koppel. "An open world blended in with a story you can break off any time you want." In the end, time pressures and technological restraints resulted in *Kingpin* being a smaller affair.

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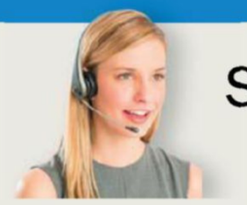

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> Before I knew it, I had a ZX81 game being packaged up by my dad and sent all over the world
>
> Jane Whittaker

JANE WHITTAKER

Few games developers have been as simultaneously influential and unsung as Jane Whittaker. Nick Thorpe talks to Jane about a storied career and a new type of publishing company

Born as a conjoined twin with a rare mixture of male and female body parts, Jane Whittaker took up programming as a young teenager during the Eighties, as a distraction from the dozens of complex surgeries being undertaken at the time. Despite contributing to many well-known projects for companies including Graftgold, Atari, MGM, Electronic Arts and Microsoft, Jane has maintained a low profile, initially using the pseudonym Andrew Whittaker and later choosing to remain uncredited due to harassment. Now as a founder of Keystone Games, a publisher which has been specifically set up to support charity, Jane has chosen to embrace publicity in order to further the cause.

The first game we've got you listed as programming is a game called *Stellar Trader* for the ZX81 home computer – how did you get into programming to make it?
I was a conjoined Siamese twin – I'm now a separated Siamese twin – and most of my childhood was in hospital. My uncle was, he's retired now, but he was a computer engineer for the air force, so he introduced me to the kit version of the ZX81. So I built that from a kit in the hospital to amuse myself. I'd got this machine and I decided I wanted to do a space game, so I got a book on Z80 machine code and then literally wrote *Stellar Trader*. It amused me and my sister during the separation surgeries, and people who came to visit us in hospital actually liked it, and my dad came up with the idea of advertising it in the classified ads of magazines at the time, like *Sinclair User*. Before I knew it, I had a ZX81 game being packaged up by my dad and sent all over the world.

It must have been difficult to find the space and equipment needed to build a computer in hospital, we'd imagine.
It was. As well as the space limitations, with me and my sister being wired up, when I started doing the Spectrum games I had to use the keyboard with my feet, just off the edge of the bed, just to find a way of using the machine. It took us as long to learn how to use the machine as it did to write machine code! It was literally just an old Boots colour portable TV and the ZX81 and the Spectrum set up on the side table next to the bed. I spent many years in hospital – it wasn't like today's surgeries, some of those kept me in hospital for up to a year at a time. I actually had more time in hospital in my childhood than I did in school.

» [Amstrad CPC] The early part of Jane's career was spent at Graftgold, mainly working on home computers.

The next thing that we're aware of is that you worked with Graftgold for a bit – how did that come about?
I was one of the partners, and I was just 15 at the time! Graftgold was originally Steve Turner, then Andrew Braybrook joined, then I joined. So for quite a while, it was just the three of us.

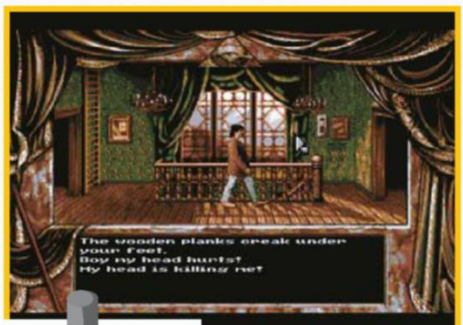
Oh, right! How did the partnership form, then?
I'm glad I'm talking to **Retro Gamer**, because you'll know these companies. You remember Hewson Software? We were all freelance for Andrew Hewson, and [it was] Andrew Hewson [who] had the idea of putting us all together.

We understand that you moved a long way to work on those games at Graftgold, too…
Yeah – when I wasn't in hospital, I'd go down to Essex for the weekend to work on those games. The

original office was above a fruit shop in Witham, near Chelmsford. I'm from Hull so I used to commute from Hull at weekends, even before I'd left school, go and write code in Essex, then go back home again and get ready for either school or hospital, wherever I needed to be. Alternatively, if I was in hospital, everything was just sort of mailed across.

During that time in your career, you worked on a mixture of original games and arcade conversions, right?
Yeah, I'm just trying to remember! The big one for me, that I got very heavily involved in, was *Flying Shark*, that did very well.

What sort of resources did you get when you were asked to convert games like that? Did Taito give you any support?
Ah, now that's a story. Gosh, you'd expect that Taito would have given you all sorts of stuff. What we got was the arcade board, and we had to go find an arcade machine and television screen to plug it into, and that was it. We had to just keep playing the game – they didn't give us any script or any walkthrough, or nothing. So we literally just keep playing the game to find out what happened next, and then copied that in the code. There was no technical support at all apart from, 'Here's the game, copy it.'



» [Amiga] HR Giger's distinctive art sets the tone for *Dark Seed*.

That must have been a nightmare to work with, given that you could only work on games during the weekends, what with being so young at the time.
Yeah, but we turned it around, I think it was in six weeks or something. Steve Turner did one version, I did the Amstrad version and Andrew Braybrook did the Commodore 64 version. In a way, that's part of gaming history in itself, because – and you might have to check this – I think we were the first team to do simultaneous versions for all three platforms. Back then, teams did a game for a platform, and we had the idea that between us we could do a platform each for the same game.

So how long were you with Graftgold?
I think I did 33 titles over a three-year period – most of those were for Hewson, who had introduced us all to each other, and then we went to Firebird and Rainbird which was all part of the Microprose empire.

We understand that you also worked with Mike Singleton on the *Midwinter* games?
Correct, yeah. When I was with Graftgold, when Rainbird was bought by Microprose, I was invited to get involved on the Microprose side of things. Bill Stealey and Sid Meier came to me and said, 'We want to introduce you to Mike Singleton, we think the two of you will work well together.' Off I went to Liverpool with Bill and Sid, met Mike, and from that day Mike and I were the best of friends, and we remained friends up until the sad end of his life. So I ended up going off to Liverpool for a while – I still hadn't formally left school, and these games took a little while to come out – and I was working on the *Midwinter* series with Mike and his business partner, a guy called Hugh Batterbury.

Someone else that you worked with was HR Giger on *Dark Seed* – that must have been quite an experience.
It certainly was. If we could wind back to *Alien Versus Predator* first though, because it was *AVP* that led to *Dark Seed*. Even though, chronologically, *Dark Seed* came out first, it was *AVP* that was in production first. What it was, I'd been involved with Giger on *Alien*

» [Jaguar] *Alien Versus Predator* was one of the few must-buy original games on the Jaguar.

Versus Predator – Ridley Scott, too, they'd done a lot of the creative input on how they wanted the game to be. I hit it off with Giger, so I was invited by him. He came to me one day and said, 'Why don't me and you do a game with my artwork?' It was a company called Cyberdreams that did it, run by a guy called Patrick Ketchum, and they basically funded the whole thing. Just before he died, the great Salvador Dali got involved as well – he was never credited because he didn't want to be, he just got involved with it. Basically it was a point-and-click adventure game, and the character that was scanned was called Mike Dawson. Mike Dawson was an actual writer, but the character that was scanned was me. So that's me walking around – they dressed me up in this weird Seventies corduroy type stuff. All the graphics were hand-drawn by Giger then scanned in, and I had to build a game around it, which was interesting because everything Giger did was phallic. I spent half the game development time trying to tone it down and make it seem less phallic. I really thought I'd got there, I really thought we had a great game, and then the game shipped, and a couple of weeks later *GamePro* magazine came to me and said, 'That was a fabulous game, we really loved that – but what was with the walking testicle?' And there was one I hadn't swapped. I thought I'd removed every single phallic reference, but it was too late once it was out in the marketplace. It did really well. [HR Gieger]

FIVE TO PLAY

A selection of the games that Jane developed over the years

MIDWINTER VARIOUS

■ While an open world adventure featuring strategy and survival elements sounds like something straight out of a 2018 press release, games like *Midwinter* were a rare thing back in 1989 – especially with a solid 3D rendered world. Additionally, see the sequel *Flames Of Freedom*.

DARK SEED VARIOUS

■ Initially, *Dark Seed* looks like many other point-and-click games, but as soon as Giger's unmistakable artwork is sighted, you know it's going to be an unusual experience. Unusually for the genre, there's a time limit on your actions, adding to the difficulty of the game considerably.

ALIEN VERSUS PREDATOR JAGUAR

■ Few licensed games capture the essence of the source material quite like this first-person shooter. Notably, your experience changes depending on your choice of creature – the *Predator* allows you to go on a power trip, while the human soldier feels like prey at all times.

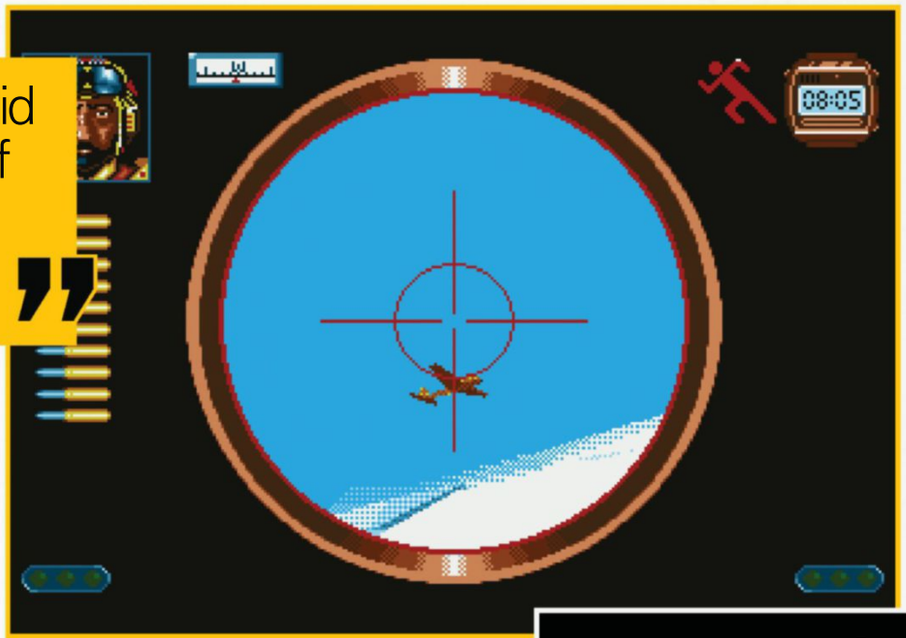
GOLDENEYE 007 N64

■ MGM wanted to do a *James Bond* videogame, but didn't want to damage the brand. Jane thought Rare to be the world's best development team, and Rare knocked it out of the park. The rest is history – *GoldenEye* remains one of the most beloved games ever, in single and multiplayer.

MICROSOFT FLIGHT SIMULATOR X PC

■ As well as contributing coding assistance to the main program, Jane has produced a number of mission packs for the most recent version of this sim. These include the expansions *Dangerous Approaches*, *Arctic Rescue*, *Cargo Crew* and *Treasure Hunt*.

> Everything HR Giger did was phallic. I spent half the development time trying to tone it down
> Jane Whittaker



» [Amiga] Jane considers Mike Singleton a mentor, having worked with him on games such as *Midwinter*.

was a very kind man – he was always very kind to me, but he was very off-base. When you stayed in his guest room he had a pentacle around the bed. The whole thing with his house was like a Gothic mansion, it scared the hell out of me, to be honest.

That sounds like quite an experience!
It was, but then I met up with one of the other programmers, a chap called Mike on the Amiga version, and went from the sublime to the ridiculous. They sent me to Detroit in the middle of all the troubles there to finish the Amiga version, and I was like, 'Oh no…' They put me in this hotel, and the hotelier said, 'I'm going to come with you to your room, because I'm going to show you how to pull the furniture over your door in the night so you don't get taken.' I thought he was teasing me, and then during the night all I heard was "bang bang bang bang", I was right in the middle of Detroit's crime land in the Nineties, it was horrendous.

It must have been a far cry from Witham!
You might get a bit of fruit thrown at you in Witham, but you didn't get a submachine gun, that's for sure.

So if all of this happened as a result of *Alien Versus Predator,* you must have been working on the Atari Jaguar a long time before it came out?
That's right. Not only was I working on the Jaguar a long time before it came out, I actually got involved with the hardware design of the Jaguar while I was at Atari. I was working on the Jaguar before the Jaguar was even called the Jaguar, from day one when John Mathieson came from Sinclair with the idea to build this console. I had to write all the dev tools for it. That console design was probably 18 months or more before we'd even mentioned *Alien Versus Predator* to people. I had to come up with the games while working on the console with John, while writing the development tools so I could make the game. I've still got the prototype here, the very first one.

» Jane was working with the Jaguar long before the rest of the world go to see it.

But you'd been at Atari for a little while before even that, correct?
Oh yeah. When I was ready to leave school, because I'd already been working at Microprose, Sam and Jack Tramiel flew across to the UK and I was back in Hull, so it was at my parents' council house in Hull, and they asked if I'd be willing to move to San Francisco. My parents couldn't do it because they both had full-time jobs, but they said I could go to San Francisco and join Atari on the proviso that I was looked after. So I left school at 16, didn't do any A Levels, because I left school on the Friday and on the Monday I was with Sam and Jack in San Francisco. They treated me as one of the family for years – literally as one of the family, I used to spend all my spare time with the family. I was basically raised as one of the kids.

That's a huge leap, to go off that far at that age, but we'd imagine that faced with that kind of opportunity, it'd be impossible to refuse.
It was something I'd always wanted. My parents had insisted that I'd be looked after and I was, I mean it was incredible – there was a car provided, they paid for my girlfriend at the time to come over and stay with us, I stayed with the family, I took my meals with the family. At the end of *Alien Versus Predator*, Sarah Tramiel lent me and my girlfriend her sports car! Every time Sam came to the UK he'd meet up with my dad,

MIDWINTER'S BIZARRE ORIGINS

How a restaurant became a host to wargaming

"Mike and I actually developed the concept for the Midwinter series in a Chinese restaurant in Liverpool – seriously now!" Surely we need to take this story with a grain of salt and some soy sauce for taste? "It's the absolute truth, it's not a yarn," Jane tells us. "We were sat in the restaurant, there was myself, Mike Singleton, Sid Meier and Bill Stealey. So we were sat in this restaurant and Sid said to us, 'Why don't you guys do a war game?' So we were going to do a big, open world war game. I was wondering how we were going to do this when Mike said to me, 'Have you ever tried tabletop wargaming?' I said no, so he said, 'Well we'll use this, the tabletop idea, as the basis for the new game.' And before I knew what was going on, Mike had been rushing around the rest of the restaurant collecting all of the condiments, and the knives and the forks and everything, and we had the knife army versus the fork army. We were tabletop wargaming, with Sid and Bill as adjudicators, and we designed the whole concept – we pulled tables together and everything. The guy who owned the restaurant was starting to get really pissed by the end of the night… I think we shipped him a few quid to keep him quiet. We actually wargamed throughout the night with Mike and me coming up with ideas on the fly, with the knife army versus the fork army. We wrote all that up the next morning and that's how the *Midwinter* franchise came about. All that intrigue and moving armies about and stuff, all from that night in a Chinese restaurant just near the centre of Liverpool."

MEMORIES OF MIKE

Jane pays tribute to his former mentor

One person that Jane has a particular fondness for is the sadly departed game designer Mike Singleton. "Mike became my mentor growing up, and I couldn't have had a better mentor," he reminisces. "I don't know if you know this, but Mike Singleton actually invented texture mapping for games. I was sat at the office with him one morning, and we'd had Ian Oliver and Andrew Onions come to visit, and they'd done *Starstrike 3D* and *Carrier Command*. We loved the games but it was all just wireframe or solid 3D, and Mike had got fed up of this, so he spent some weeks and came up with the idea of a texture map. I was sat in the studio one afternoon and Mike says, 'Come on over and see what you think to this,' and I walked over and there was a spinning globe of the Earth, properly texture mapped. Being the generous guy he was he shared that code so everyone could have that for their games."

But for Jane, it's important to remember who Mike Singleton was, as well as what he did. "I know people talk about his games and everything, but they need to know the guy behind them, he was a wonderful man. He was a lovely man. A really kind, generous guy. Barking mad, but I loved him for it. I went to his house one day as he'd been decorating, so we all went from the office to see. Mike said, 'I couldn't quite decide what wallpaper I wanted,' and he'd done his entire house in a different wallpaper for every vertical strip. He must have had 40 wallpapers in his living room. He was the smartest, kindest person I've ever known. For my birthday, and I was still only a kid, I was a Beatles fan, and Mike, Hugh and Sid Meier actually took me on a Beatles tour of Liverpool. That was what Mike was like – if he knew you had a birthday or something was happening, he'd always arrange something. I can't sing Mike's praises enough."

even now they do. I was welcomed with open arms, and I loved every minute of it.

After the Jaguar failed to compete, you must have had to move on from Atari?
I moved on because Atari effectively sold themselves after the Jaguar, Sam and Jack were retiring, so I went to MGM then. Because I'd done stuff with Giger and done *Alien Versus Predator*, I was invited to head up the interactive division at Metro-Goldwyn-Mayer.

Just so we're clear, since there's no release to check, was the cancelled M2 game *Power Crystal* something you did for MGM?
No, that was a side project for 3DO, because in those days you could still do projects in your own time. I was approached by Trip Hawkins and Dave Maynard, and they said, 'We've got this new M2 console coming, you did the best game for the Jaguar, do you want to come and do the launch game for the M2?' I was already in the process of moving across to MGM, so I told MGM about this and they said, 'As long as you do your day job with us, this isn't competitive so it's fine.'

***Power Crystal* was an open world RPG – how much of that was drawn from your *Midwinter* experience?**
Oh a ton of it. The whole way of building 3D worlds, I'd learned how to do quest structure from Mike. It didn't play like *Midwinter*, it was a traditional fantasy RPG. People who played it later said it was like an early *Zelda* – not *Wind Waker*… *Ocarina Of Time*? That's sort of how it played like. It was finished and ready to go out, and they cancelled the console. They had some really quality stuff, it was a lovely console – it wasn't the quality of the console or the games, it was purely a financial decision, and it was really sad.

So at MGM you worked primarily with the *James Bond* games – that must have been a fun, high-profile thing to work on.
Yeah, I joined as director of development in the interactive division and within six months, I'd got my promotion to vice president and they wanted me to work on the movies and the games. When you looked at it from a games point of view, I think I made the right decision at the time to focus on *James Bond* games, because you can only do so much with 2001 and *Chitty Chitty Bang Bang*. They had lots and lots of movies, but none that I thought would make big games franchises.

» [PS2] Jane's time at Electronic Arts involved oversight of a huge numbers of projects, including simulations like *Theme Park World*.

At that point in the mid-Nineties, movie licences had a pretty bad reputation. How much of a challenge was it to turn that perception around?
Oh, it had gotten to the point that the movie guys had seen these games, which bore very little relation to the movies they were based on, and got so scared that they didn't want to do movie licences anymore. Fox took a bit of a risk with *Alien Versus Predator* and it paid off for them, and that was what convinced MGM to actually take a punt and have a try at making some franchises based on *Bond*. There was a lot of discussion where they were saying, 'We don't want to make movie games like they've been done in the past, because it'll damage us.' And that led to *GoldenEye*, actually. The reason *GoldenEye* is as good as it was is because of that ethos that it had to be right. That's why it was Rare, because as far as I was concerned Tim Stamper had the best team in the world. It was a very deliberate policy, because there was a huge nervousness in MGM about what had gone before.

You always seem to have a lot of projects going on at once, it must be a lot to keep track of?
That's been me all my years – I get up, I work on a game, and I go to bed, seven days a week. I still do. I don't do anything else, don't do a social life. I've got a three-year old car with 500 miles on the clock and I live in the countryside, so that tells you how often I go out.

» [N64] While at MGM, Jane worked on prolific Bond games, such as *GoldenEye*.

> "I think I made the right decision at the time to focus on James Bond games"
> Jane Whittaker

» [PC] The 2017 release *Rogue Islands* was the first game to be published by Keystone Games.

SELECTED TIMELINE

GAMES

- **FLYING SHARK** [1987] AMSTRAD CPC
- **MIDWINTER** [1989] VARIOUS
- **DARK SEED** [1992] VARIOUS
- **ALIEN VERSUS PREDATOR** [1994] JAGUAR
- **POWER CRYSTAL** [1996] M2 (UNRELEASED)
- **GOLDENEYE 007** [1997] N64
- **MICROSOFT FLIGHT SIMULATOR X (EXPANSIONS)** [2006] PC
- **CIRCUS WORLD** [2011] PC
- **ROGUE ISLANDS** [2017] PC

» [PC] While being a board advisor to Microsoft for many years, Jane still found time to code.

» [PC] *The Sims* is one of the most notable franchises that Jane worked with as Electronic Arts' designated "studio troubleshooter".

I've never conceptually or technically found it a problem, I'm happy to jump around between things. When I went to EA, that's part of the reason they employed me – part of my job was to go between all the studios and troubleshoot projects, write code, manage it and deal with teams across 30, 40 projects at a time. EA picked up that I was one of those people who would spin all these plates. Officially, I was the executive in charge of production, unofficially however I was the studio troubleshooter.

In recent years, you've been best known for working on the *Flight Simulator* expansions. How did you come to work on those?
It all stretches back to Microprose, because they used to be huge in flight simulators. Sid and Bill roped me into helping out on those. They dragged me into that genre and I loved it, so I stayed involved with that for years and years as a hobbyist. I was asked by Bill Gates to assist the board at Microsoft, where I worked for ten to 12 years. They were working on *Flight Simulator X*, and Bill Gates asked me if I'd give some support to that group. As a flight simulator fan I said, 'Yeah, I will,' and it really came about more by accident than anything else – someone on the group said to me, 'Why don't you do some expansion packs?' So I decided to do it, but every expansion pack would go to support a children's charity. Keystone was formed out of that.

» [PC] Jane's current project is *Homicide Detective*, a mystery investigation game that will be published through Keystone Games.

Yes, we were going to ask about Keystone – as we understand it, the company doesn't operate on a for-profit model, and the profit instead goes to support the children.
While I was at Microsoft I got approached, and Microsoft and other companies got involved, to create Keystone. The Serious Fun children's charity, which was founded by Paul Newman – it's called Above The Wall in the UK – they came to me and asked if I wanted to continue helping the kids, but on a bigger scale. They had the idea of Keystone as a publishing and development company. We got various people together from the industry – my old team out of EA, some people out of Microsoft, some good people – and we formed Keystone. We've got support from Microsoft and Unity, support from Valve for Steam. We've had support from over 30 companies in the industry who have said 'We're going to help you build this.'

So how does Keystone Games work?
My premise was, and it was agreed by the board, that we will run just like any other publishing and development company, whether that's an Electronic Arts or a Microsoft or whatever. We buy third-party titles or we license third-party titles or whatever, we put them out with full worldwide distribution, we have four internal teams working on projects, we have teams working in Singapore, London, Calgary and Michigan. So day-to-day, because we had significant investment we've been able to start off running as quite a reasonably sized company. People ask me, 'Are you an indie team?' and we're not really – not with four internal development teams.

So you've definitely got some strength there, in terms of support and numbers.
Yeah, but the difference was that instead of the profits being funnelled into the investors, all the investors in the company have invested as a donation, and the ongoing profits of the company go straight to the children's charity. It runs just like any other publishing company, but at the end of the day we don't use the profit to line anybody's pockets. We all agreed that the profits would go to the kids, and it's unique in that sense.

It's been an incredible career so far, and it's amazing to think that people are just finding out about it now.
Well, that's because whenever I go to a company, because of all the issues of being conjoined, I've only ever signed up if they sign a non-disclosure agreement for me! So it's certainly been unusual since I've come out of the woodwork.

Crash Bandicoot

BATTLE OF THE BANDICOOTS

» PLAYSTATION » 1996 » NAUGHTY DOG

When I was in sixth form I was in a band, and during the summer I'd head over to my friend Tom's house and we'd spend our free time practicing or writing songs. The thing is, we were still (technically) teenagers, and experts at procrastination – we had it down to a fine art.

One bright summer day, we were all at Tom's practicing for a gig that took place the next day. During a break, I whipped out my PSP for some *Crash Bandicoot*. "Whoa, that *Crash*?" Tom asked. "I've got that on my PSone, it was awesome!" – this all took place in 2010, so *Crash* was retro by this point.

Skip forward five minutes and he'd started a new game on his PlayStation and I'd started another new game on my PSP. We were going to race to the finish. Screw the gig; the starting pistol was about to fire for the most important contest of our lives. The rest of the band was enthralled and ready to sub in if Tom or I got too tired, it was *on*.

Hours rolled by, then we got to Slippery Climb – the game's infamously difficult level. We were neck and neck on that level for what felt like days – palms sweaty, eyes itchy from not blinking, and all of us forcing that feeling we should be finessing our songs further and further back into our brains.

We never got past that level, though; we got too tired in the early hours of the morning. And the next day we bum-noted our way through our setlist as *Crash*-addled zombies. Do I regret wasting that fertile practice time, though? Not a chance.

>> This month Nick gets to grips with a awe-inspiring remake of a hit PS2 game while Darran plays through two classic shooters that have been rereleased on Switch

Shadow Of The Colossus

A COLOSSAL ACHIEVEMENT

INFORMATION

- **FEATURED SYSTEM:** PS4
- **RELEASED:** OUT NOW
- **PRICE:** £29.99
- **PUBLISHER:** SONY COMPUTER ENTERTAINMENT
- **DEVELOPER:** BLUEPOINT GAMES
- **PLAYERS:** 1

If you've followed Retro Gamer for a long time, you'll know we have a great deal of respect for Bluepoint Games. The studio has always done a fantastic job with the creation of HD remasters of past games, carefully recreating low-resolution assets to better suit modern displays while maintaining the original appearance of each game. However, *Shadow Of The Colossus* marks a first for the studio – instead of reworking the existing game for new hardware, it has been tasked with building a full remake of one of the most beloved games of all time. Needless to say, we had some worries about whether the studio had finally met an insurmountable task.

» [PS4] The look of the game can be altered via filters – from left to right we see no filter, Radiant and Mono.

The good news is that our worries were unfounded. We took out the PlayStation 2 and directly compared the games, and can say with confidence that while the remake does contain slight deviations from the original which purists may not enjoy, the developers have done a fantastic job of updating the game while preserving its essential aspects.

If you're not familiar with *Shadow Of The Colossus*, the basic tale is as follows: Wander has brought Mono to a temple known as the Shrine Of Worship, with the goal of resurrecting her after she was sacrificed. An entity named Dormin offers to do this, but only in exchange for defeating the 16 colossi that inhabit the land surrounding the temple. Together with his horse Agro, Wander sets out to slay the grand creatures and honour his end of the bargain.

Visually, the PS4 version of *Shadow Of The Colossus* does nothing to betray its origins as a game from over a decade ago. Every piece of terrain, every colossus and every effect has been recreated from scratch, and the result is one of the most beautiful games of the generation. On a technical level, the game maintains a solid 30fps update, comfortably free of the kinds of frame skipping issues which could at times sully the experience in the original PlayStation 2 version.

BRIEF HISTORY

» After making the critically acclaimed but commercially underwhelming *Ico* early in the PS2's life, Fumito Ueda and Team Ico delivered a decidedly different prequel in the form of *Shadow Of The Colossus*. This 2005 release was one of the system's most ambitious games, and one of its last major original projects before the PS3 arrived.

PICKS OF THE MONTH

DARRAN

Zero Gunner 2

It's not identical to the earlier Dreamcast version, but it's certainly a whole lot cheaper.

DREW

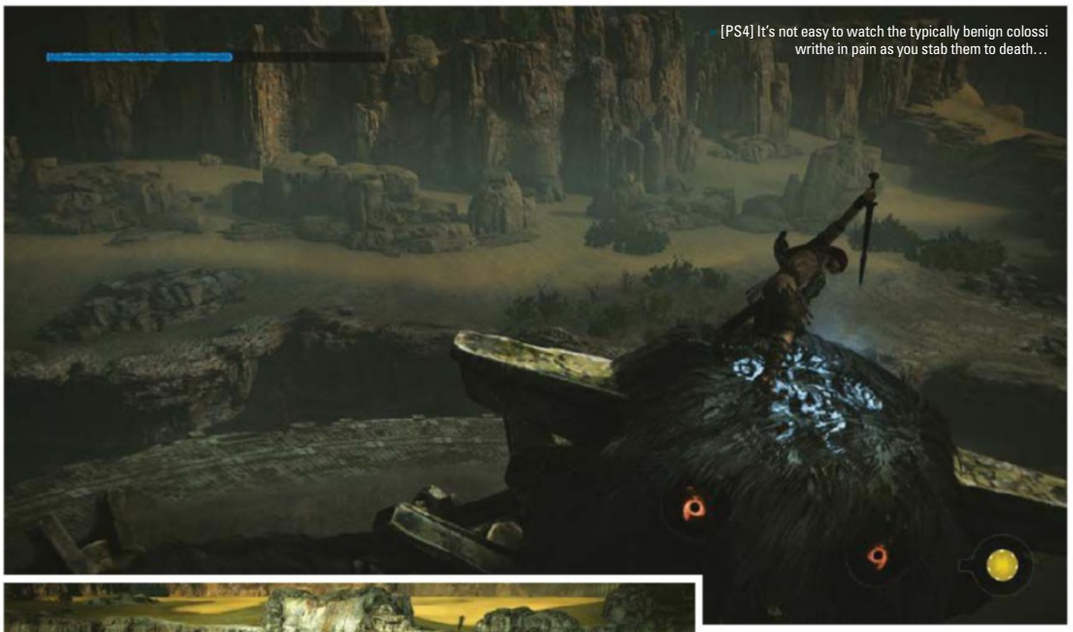
Monster Hunter: World

It's rare for a game to consistently surprise me, and *World* keeps my eyebrows raised.

NICK

Shadow of the Colossus

How good is this? Good enough to distract me from the brilliant *Super Mario Odyssey*. Don't miss it.



» [PS4] It's not easy to watch the typically benign colossi writhe in pain as you stab them to death…

» [PS4] Environmental detail is massively improved over the original game – the world looks incredible.

The graphical presentation is also the area in which you'll notice the most changes. The PS2 original had a very distinct look, featuring very muted colours and barren landscapes that emphasised Wander's solitude. While the feeling of loneliness persists in the PS4 game due to the empty environments, we now see more signs of life – there are flowers and colours that had simply never been present in the past. Likewise, the overwhelming light effects of the original have been toned down considerably. You can tweak the game's colour filters to achieve an effect much closer to the original, but these slight artistic alterations may bug purists.

Finding a colossus and strategising to ensure its demise is as satisfying as it ever was, even though it still feels cruel to destroy such majestic creatures. Each essentially acts as a self-contained boss fight, with the body of the colossus acting as both target and battlefield. Take the second colossus as an example – you must first fire an arrow into the foot of the four-legged beast to bring it to its knees, then climb its leg to stab weak points at its front and rear, periodically clinging onto something safe as it tries to shake you off.

This aspect of the game has also seen improvements, although they're so minor that you're unlikely to notice unless comparing the original and remake side by side. The control scheme has been revised to more closely represent current conventions – no more two-button dodge roll – though you can revert to the original control scheme if you so desire. Overall control responsiveness has also been significantly improved, to the point that you can feel a difference between the two versions when engaged in tricky climbing scenarios.

Shadow Of The Colossus was a masterpiece in 2005, and the fundamentals of the game remain brilliant. We'd hoped for a remake that would live up to the original, and it's hard to remember one as carefully considered and respectful as this. Purists might decry the various changes and claim that the PS2 game with a facelift would have been fine. But that project already existed, in the form of Bluepoint's excellent PS3 remaster of *Ico* and *Shadow Of The Colossus*. But that was the equivalent of upgrading from a VHS copy of a film to DVD. What's on offer here is akin to having all the sets rebuilt, every shot retaken, and every role recast.

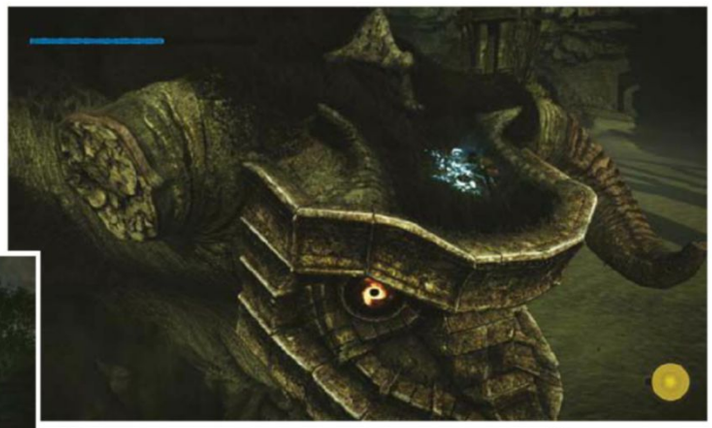
So, if you can't stand the thought of a proper remake, no matter how reverential, this isn't the game for you.

For everyone else, it's pretty much essential – one of the best games ever has been remade, in a way that highlights the strengths of the original while removing the very few defects it ever had. Fans will see a favourite in a whole new light, and newcomers will get to experience a truly classic game without the detrimental effects of outdated graphical technology. In both cases, it is an incredible experience and one not to be missed.

In a nutshell

***Shadow Of The Colossus* was already one of the best games ever, and this stunning remake will bring it to a whole new generation. The fact that it's launching at a mid-range price is the icing on the cake.**

>> Score **94%**



» [PS4] The unique visual design of each colossus still looks as evocative as it did in 2005.

» [PS4] Agro can accompany you during some fights, like this one against Phaedra.

WHY NOT TRY

▼ SOMETHING OLD
ICO (PS2)

▼ SOMETHING NEW
THE LAST GUARDIAN (PS4)

PICK OF THE MONTH

Monster Hunter: World

» **System:** PS4 (tested), Xbox One » **Buy it from:** Retail, online » **Buy it for:** £49.99

With more obtuse Japanese games that demand a high level of skill as an entry requirement in vogue at the moment, the global stage is actually perfect for a console-based *Monster Hunter* right now.

We were sceptical that the series wouldn't really translate well to a console experience, though. The mission-based structure of the series just works so well on a handheld. But we were wrong. Capcom has proved with *World* that *Monster Hunter* has a claim to consoles as much as any other game series.

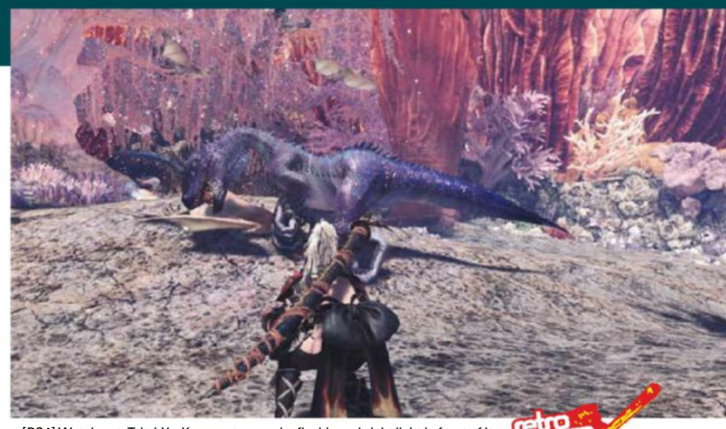
The setup is largely the same. You're still a hunter, you still kill large monsters and carve off their materials to make fancy-looking armour and weapons. What makes *World* work so well is that Capcom has downplayed the mission-based structure in favour of excursions into the play area. Here, you can explore any given area at your pleasure and hunt whatever beastie you feel like – providing they're actually in the area at the time you journey out. Missions now serve as a means to progress the game's story, or to upgrade the hub area and obtain materials.

In terms of game design, *World* is sublime. Weapons have more combos, and feel visceral as hell when they meet their mark. Each of the game's areas all feel unique, and the game's focus on making you constantly upgrade your gear means you are always working towards something.

Speaking of environments, *World* portrays a convincing ecosystem, one where you can practically use anything to your advantage – be it higher ground or snatching a Flashbug off a log to make a flashbang-like grenade. It makes exploring the game's world worthwhile and will keep gamers hooked.

While *World* is a high point for the series, it does come with old issues. It can be tough to get to grips with for newcomers, and the camera – despite using dual-analogue now – still needs work. Performance is also a mixed bag, with a fluctuating (albiet above-30fps) framerate and a rough Xbox One version. Still, if you like your *Monster Hunter,* this could be your Game Of The Generation.

>> Score **92%**



» [PS4] Watch out, Tzitzi-Ya-Ku can stun you by flashing a bright light in front of it.

» [PS4] Legiana's home is the Coral Highlands, a beautiful area to explore.

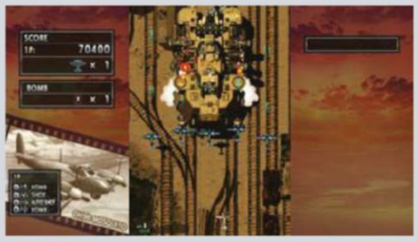
Street Fighter V: Arcade Edition

» **System:** PS4 (Tested), PC
» **Buy it for:** £34.99 » **Buy it from:** PSN, Steam

When it came out two years ago, *Street Fighter V* clearly had excellent core game design, but lacked the content we needed to recommend it. Since then the game has gained significant single-player modes including Story and Arcade modes. This offers themed routes based on games from *Street Fighter* through to *SFV,* but oddly enforces that you also pick a character that fits the theme.

As before, additional characters can be bought as DLC or unlocked through earning Fight Money in-game. Each can now also choose between two unique V Trigger abilities, adding to the strategy. All of these improvements mean that the game is well worth revisiting if you previously passed on its original debut.

>> Score **82%**



Strikers 1945 Part II

» **System:** Switch » **Buy it from:** Online
» **Buy it for:** £6.99

The original *Strikers* is already available on Switch, so this sequel makes a pleasant stablemate. Essentially it's business as usual, with six different World War 2 planes taking to the skies and flying through a variety of war-torn environments, which culminate in battles against huge craft that transform into giant mechs. The Switch port is very good with a range of filter options and even the ability to play in tate mode, except the developers don't allow you to play with an attached Joy-Con this way, which is a real oversight. The scoring system isn't particularly complex, but the later difficulty levels do offer some insane bullet patterns to tackle, meaning you'll get plenty of replay value for the £6.99 asking price.

>> Score **70%**

Zero Gunner 2

» **System:** Switch » **Buy it from:** Online
» **Buy it for:** £6.99

Considering the Dreamcast version sells for over £100, the Switch conversion's £6.99 makes it a bargain. While its interesting rotational control system takes a while to get used to, it does open up how you approach stages as you'll ideally be using every part of the screen to mop up the most points. There are omissions over the Dreamcast game, as the original code was lost and this version has been rebuilt from the ground up. As a result, things like the replay is lost, red 'P' tokens no longer bounce back into the playfield and there's a glitch that turns enemy bullets invisible (although we've never personally experienced it). That said, this is a great blaster with some fantastic boss battles.

>> Score **77%**

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Gamers HOMEBREW

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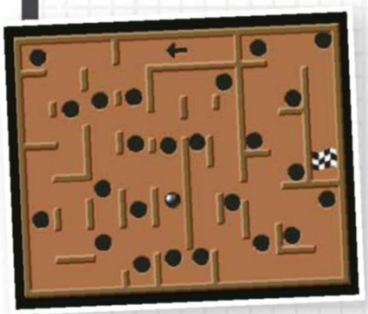
» [Amiga] Shiny spaceships and asteroids in *Golden Wing*.

Gaming NEWS

» [PC] Somebody took a sword along to a raptor fight.



» [Amiga] *Laberinto* offers up two-dimensional marble manipulation.

HOME COMPUTER HEAVEN

The Wide-Dot Pixel Game Jam was built around the idea of visually emulating classic computers and consoles, most specifically the machines with rectangular pixels like the Atari 8-bit or C64. Despite a lot of interest being shown throughout the competition, only three entries were officially submitted. Although it's probably best considered a 'playable preview', we'll start with *One Shall Rise: JAM*, a cute action platformer with some thought required since there are blocks to push around, platforms which can be destroyed and doors to unlock.

There was more platform-oriented action with another work-in-progress entry, *Dino Dark* sends the player into a dingy and perilous environment which can be illuminated with torches. These burn down quickly and nasty things lurk in the shadows, so there isn't time to hang around. Finally, the entry we found to be the most enjoyable was *Raptor Knight* which is a simple hack-and-slash battle where vicious dinosaurs need to be taken down by a sword-wielding nobleman. After each successful battle our armoured hero can choose to upgrade one of his core stats, for example making his attacks faster or restoring lost health.

It's a shame there weren't more completed entries submitted, but what was released can be downloaded from this game jam's website at Kikstart.eu/wide-dot-2017 and, hopefully, there'll be future iterations.

Another event with new games was the Spanish Capacitor Party 2017, which offered up a collection of graphics and sound productions, along with nine games for the Amiga – so they're a higher resolution than the Wide-Dot games – and the title which grabbed most of our attention has *Golden Wing*, an *Asteroids*-inspired single-screen blaster with some nice graphics and simple, no-nonsense shooting action; a second entry called *Space Combat* is similar but incomplete and doesn't feel as solid to play.

Laberinto is an interesting title as well, since it simulates those puzzles where a metal ball has to be rolled through a wooden maze to the goal while avoiding holes. It's a simple game but strangely relaxing, especially with the sampled ball bearing noises during play. The primitive-looking *Raining Eggs* is another uncomplicated game which sees the player's bucket patrolling beneath a flock of chickens to catch eggs as they're dropped, hopefully without letting any splatter the ground. All of the games and other competition entries can be found behind Kikstart.eu/capacator-2017 – watch out, there are a few adult images in there.

NEW GAMES NEEDED

If you have a homebrew project you would like to see featured then please contact us at: **darran.jones@futurenet.com**

» [Atari 8-bit] Nobody seems to mind Jack standing on the furniture.

THE EARLY YEARS

Jack is a very naughty child with a mission, aiming to liven up his otherwise rather dull town by causing as much chaos as is possible for a toddler armed with a devious mind and a pea shooter. Jack will have to avoid the adults though, otherwise his misdeeds will earn him a good spanking.

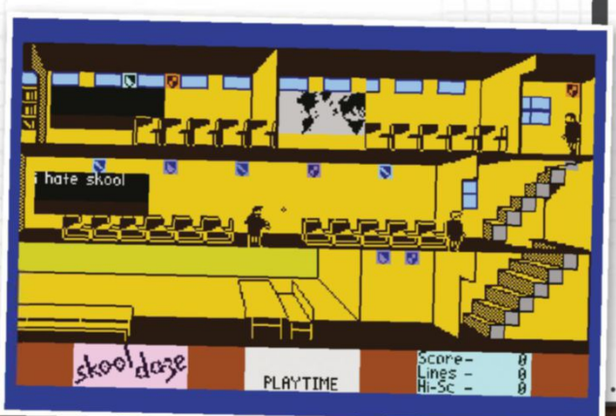
Converted from the Spectrum to the Atari 8-bit by Mariuszw and Tezz – stopping off at the Amstrad CPC to borrow some sound along the way – *Jack The Nipper* is a platform-based puzzler where being naughty is rewarded. Kikstart.eu/nipper-a8 will send you to detention.

> **"Jack The Nipper is a puzzler where being naughty is rewarded"**

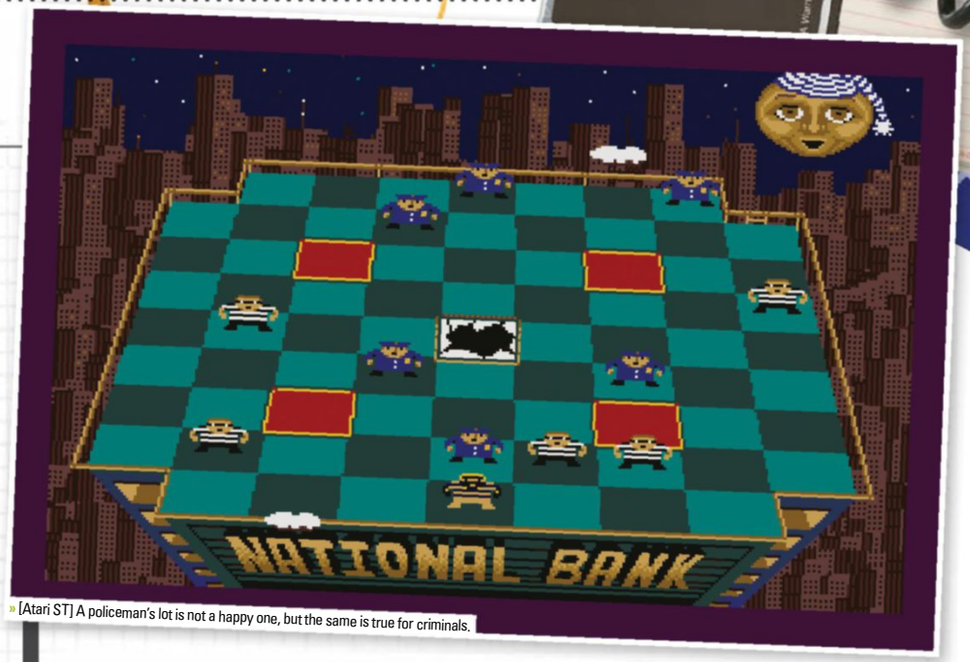
OFF TO SCHOOL

After being a brat why not jump into the education system with another Atari 8-bit port, this time of *Skool Daze*. Eric's report will get him into trouble with the headteacher so, his only course of action is to steal it first even if that means essentially assaulting some of the staff to get the school safe's combination.

This conversion is based on code from the C64 and again comes courtesy of the prolific Mariuszw, this time with Jose Pereira helping on the graphics front. Head to your next class at Kikstart.eu/skool-daze-a8.



» [Atari 8-bit] Swift but unofficial justice for the pupil who left graffiti on the blackboard.



» [Atari ST] A policeman's lot is not a happy one, but the same is true for criminals.

HOMEBREW HEROES

We chased Cops And Robbers Chess developer Kevin Scott onto a rooftop for a little chat about how it was resurrected and where the idea for a two-player strategy game on the Atari ST came from

THE BIG INTERVIEW

First off, where did the idea for *Cops And Robbers Chess* come from?
My brother-in-law, Larry Scott and I were discussing how we could put a new twist on a chess-type game. We came up with the idea where you push pieces off a skyscraper, but wasn't sure how that could make sense? Then we realised that if it were cops and robbers on the roof of a bank, it would fit. And the ideas just kind of went from there, like having a skylight in the middle they could fall in as well, and exhaust fans that would blow a piece up in the air.

And what lead to it being resurrected for release?
Cops And Robbers Chess was very close to being done but was shelved, so I really wanted to go back and finish it. And especially since the art work done by Larry on that game was so awesome, I felt it really stood out to me as a unique and fun game. Also, I wanted to add clouds which would help to keep pieces from gravitating too much toward the centre.

» [Atari ST] One of the criminals does a Marilyn Monroe impression.

Did you find it difficult returning to a previous project?
Yes and no. Because I'm a developer full-time for a company that writes software for the background screening industry – frssoftware.com – it's hard to find time to write code when I get home since I'm usually braindead by then. But it wasn't as bad as I thought it would be because I had added a lot of comments in my code. So it was pretty easy to pick it back up. Comment your code, people!

What sort of feedback have you had so far from Atari owners?
Well, the only commercial game we sold was *Cops And Robbers, Too!* through JV Enterprises and we have received some good reviews on that game over the years. But the shareware games we have released have had limited responses. Hopefully, we will hear from some devoted Atari fans regarding *Cops And Robbers Chess*. That is the real motivator to continue developing games, if people play and enjoy them.

Finally, does Outland Quest Software have any future plans you can tell us about?
I know lots of people say this, but I'm really excited about how many of the classic games from years ago are making a comeback on the handheld and tablet scene. One thing I think there could be more of are 'tabletop' or 'pass-and-play' type games. For example, when my wife Beverly and I go out to eat and are waiting for our food, we love to play Jenga on my phone. It's a fun pass-and-play-type game. I think *Cops And Robbers Chess* is a great example of that as well. Since there are some great Atari ST emulators for Android, you can play it with a friend now, but I would love to create other types of games like that, so we'll see. Keep an eye on our website at outlandquestsoftware.com.

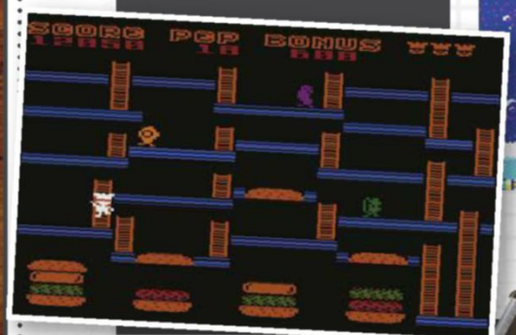
DO YOU REMEMBER?

Burger Chef **on the Atari 8-bit is a public domain clone of the arcade classic *BurgerTime* where a chef must construct massive burgers by pushing their component parts down through the game's play area and stacking them up right at the bottom.** The current kitchen is deemed complete when all of the burgers have been assembled for the waiting customers.

The layout of the platforms varies on each stage with each being more complicated to navigate than the last, so just getting to the burgers will become harder over time. And there are other ingredients as well which apparently aren't happy about not being served up and spend their time chasing the burger flipper around; these are fatal to the touch but can be temporarily stunned with pepper. Kikstart.eu/burger-chef-a8 will get you started.

» [Atari 8-bit] Health and safety doesn't extend to preventing chefs walking on the ingredients.

» [Atari 8-bit] Why is the chef always so small in these games?



WHITE LIGHT

» **PLATFORM:** BBC MICRO » **DEVELOPER:** RETRO SOFTWARE » **DOWNLOAD:** KIKSTART.EU/WHITE-LIGHT-BBC » **PRICE:** FREE DOWNLOAD (£11.95 + P&P, PHYSICAL)

» [BBC Micro] I stared at the boss and it stared right back.

» [BBC Micro] A watery world, but no sign of Kevin Costner anywhere.

For decades the galaxy has been plagued by industrial pirates but previously the authorities pushed the problem under the rug, hoping it wasn't going to get any worse. That policy has backfired somewhat because the pirates' latest target for pillaging has been the facility which was housing the White Light, a source of long-term and safe-to-use energy which was previously keeping the lights on for countless colonies. That means the pirates' actions have put the safety of entire planets at risk and it's time that they were dealt with.

Because this is a shoot-'em-up, that means sending in a lone fighter craft to retrieve the White Light safely while making as many pirates as possible regret their actions before they're reduced to space dust. The craft being used for this mission is reasonably manoeuvrable and equipped with some solid firepower, but shooting at ground bases will also release power-ups which can make those weapons more formidable or add to the stock of screen-clearing smart bombs.

The pirates won't simply line up and wait to be destroyed, however, and there are plenty of them to deal with during the 14 long stages, each of which ends with a boss battle where the scrolling stops and a series of well shielded bases pelt the player with bullets. One of the keys to long-term survival is learning the attack patterns – both where they appear throughout each level and how the craft move – because there are times when keeping out of harm's way is sensible.

Publisher Retro Software is billing *White Light* as an unofficial sequel to the classic BBC blaster *FireTrack*, which means it has some rather large shoes to fill; and that's exactly what it does, dishing up vertically scrolling shooting while either matching or improving on the game which inspired it. BBC Micro owners should already be thinking about strapping in, getting on with saving the galaxy and teaching those pesky space buccaneers a harsh and rather violent lesson.

>> Score **94%**

SQIJ 2018

» **PLATFORM:** ZX SPECTRUM
» **DEVELOPER:** TARDIS REMAKES » **PRICE:** FREE
» **DOWNLOAD:** KIKSTART.EU/SQIJ-2018-SPEC

» [ZX Spectrum] There's a fragment of the Ener Tree just waiting to be picked up.

Sqij lives in a post-apocalyptic future where every creature has been left to fend for themselves; the only driving force for most is survival, but Sqij's mutation has lead to an increased mental capacity so this wretched creature can reason and plan ahead. Deep within the caverns he calls home are parts of the fabled Ener Tree which will grant immortality if reassembled, assuming he doesn't die of hunger or being eaten by the other denizens of the caves first.

The Spectrum conversion of *Sqij* from 1987 is considered to be one of the worst games ever released on that platform in part because a 'feature' renders it quite literally unplayable, but fortunately this new iteration ignores that version to instead take inspiration from the C64 original. That wasn't exactly an amazing game and this conversion is difficult even after some tweaking, but the result is actually entertaining.

>> Score **68%**

» [ZX Spectrum] Sqij pauses in his quest to grab a quick bite to eat.

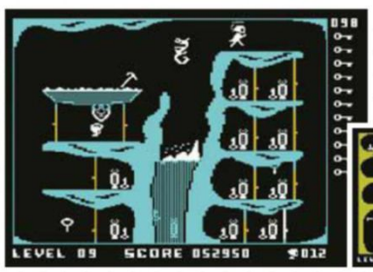
GENIUS 2 – INTO THE TOY CAVERNS

» **PLATFORM:** COMMODORE PLUS/4 » **DEVELOPER:** LIVEARCADE
» **DOWNLOAD:** KIKSTART.EU/GENIUS-2-264 » **PRICE:** FREE

***Genius 2* picks up where the first game – which was released on multiple platforms and based on creator Daniele Liverani's rock opera – left off both for story and in-game action.** The Dream League Force are searching for a particular Twin Spirit which, if destroyed, will end the dream where Genius is racing against time, killing the king's young son in the process.

Therefore, our protagonist must avoid all of the patrolling nasties and collect keys which, in turn, unlock doors leading to bonus items and further keys. Once the final door is opened a final item can be collected and the stage is complete. As before, there are power-ups which materialise occasionally that do things like unlock almost every door or destroy roaming enemies, and each stage has a time limit which needs to be kept in mind while waiting for a safe route between enemies to materialise.

>> Score **82%**



» [Plus/4] Genius isn't sure what that creature is, but running away seems sensible.

» [Plus/4] Which of the doors will this key open?

ROUNDUP

***Captain Cloudberry – Episode 4* is a single-screen, one-button action game where the titular pilot must pop all of the balloons on each stage before his fuel runs out to progress.** Control of the plane is limited to rotating 45 degrees anticlockwise with each press of the fire button, so manoeuvring safely around the clouds will take forward planning and precise timing. Kikstart.eu/cloudberry-c64 goes to the C64 Scene Database page where the good captain can be found.

Fans of Backgammon might want to give *Boray Gammon* a try; it's a version of the board game which was originally started on the VIC-20 but then moved to the Plus/4 – or even a C16 with a memory expansion. Roll the dice at Kikstart.eu/boray-gammon-264.

COPS AND ROBBERS CHESS

» **PLATFORM:** ATARI ST » **DEVELOPER:** OUTLAND QUEST SOFTWARE » **DOWNLOAD:** KIKSTART.EU/OUTLAND-QUEST » **PRICE:** FREE

A robbery at the National Bank has led to a stand-off after the police arrive earlier than the villains had planned for. Now everybody is on the roof and the only chance of escape for the crooks is pushing the rozzers off to their death, but it seems that their adversaries are putting aside thoughts of serving or protecting and are going with the same plan.

A human player takes charge of each side and must keep their own group safe while both dealing with the opposing minions and allowing for the way their own characters will move when pushing. Although the initial temptation is to simply storm forwards and nudge opponents towards a ledge or the open skylight, that won't prove successful in the long run because it leaves pieces exposed, so players will only succeed by planning ahead and trying to goad their opponent into making a mistake.

>> Score **84%**

» [Atari ST] What goes up must come down with a surprised expression.

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STAR LETTER

WE HOPED YOU'D NEVER ASK

Hi **Retro Gamer**,
I know politics is a dirty word, but will the uncertainty of Brexit have an effect on the gaming industry? Will we see a shift in customer numbers, as those whose jobs are under uncertainty over low wages and no pay rises look for something more fun and affordable, in terms of new retro gaming in game or book formats?

It's hardly a bad start to the year when people (like me) have had our new *Crash* annuals delivered into our sweaty paws, whilst we have The C64 Mini and ZX Spectrum Next to look forward to, despite the uncertainty over the leave vote. A light at the end of the tunnel maybe?
Cisko Kidd

» We could well be seeing customs declarations on packages from our continental cousins post-Brexit.

We've already had some economic impact from Brexit in terms of a weakened currency driving up inflation, but this pressure hasn't driven people towards retro gaming yet. Even if there's more harm, we don't foresee a major leap towards retro happening simply because retro gaming is an expensive hobby. What you're more likely to see is people stocking up on cheap last-gen games and doubling down on free-to-play games.

We don't know what form Brexit will take yet. However, the main difference will be that if the UK leaves the single market and customs union – the so-called 'hard Brexit' – it will be more expensive to buy goods made in Europe or imported from within Europe, and that includes retro games. In that case, they'd become subject to the same import charges you pay on items from the USA, Japan and elsewhere. If you sell games you'd also have to start filling out customs declarations to send games into the EU, and customers there would have to pay import charges. This hit to your wallet might be offset if the UK can agree improved trade deals with non-EU nations, but no new trade deals can be signed until the UK has already left the EU.

DEADLY DISCS

Dear **Retro Gamer**,
I'm sure you thought you had got rid of us. The old ones, from 'the before times' – but some of us remained, ever vigilant, waiting for a sign of weakness. Now, we scent blood.

By all that, I mean that now you're doing cover-mounted gifts at a higher price point again, you've got no excuses. So can we *please* have the iconic cover discs from the Live Publishing era back?
Pete Youngman

» We stopped doing cover discs in 2005, but some people still want to see them return…

The old cover disc format wouldn't work too well anymore – they were a cool idea when most homes didn't have broadband connections, but we're now at the point where they do. However, if the right kind of disc-based gift came along, we'd definitely consider it.

BEAUTIFUL BY DESIGN

Hello **RG**,
I'm a fan from across the pond in Orlando, Florida and I'm about four issues into my subscription so far. I've been thoroughly enjoying the issues, not only as a fan of games, but as a designer. I'm a graphic artist at a print company myself and I really enjoy the clever ways your team implements the design of the articles to reflect the games that they're about.

I've also noticed some naysayers in the fan mail sections complaining about "boo hoo this isn't retro, that isn't retro" etc. Haters gonna hate, I really enjoyed the great coverage of the Xbox a few issues back. The PS2/Xbox/GameCube era is great for getting into collecting now and I think it makes perfect sense to talk about these games.

Keep up the great work, fellas.
Maxwell Nolan

Thanks for the kind words, especially regarding design – we often ask tricky things of Sam, like the *MUD* feature in this issue, and his design work always manages to add value to the features.

As for the PS2, Xbox and GameCube, we're happy with how things went with last year's coverage and we're glad to hear that you are too. We won't be doing more than one feature per issue focusing on these more recent retro systems, but they are definitely here to stay now.

TREASURE ISLAND QUIZZY

Dear Sir,
Recently a friend and I enjoyed a gaming marathon on his old PlayStation and PS2 consoles – not on arcade games or first-person shooters, but a couple of quiz games!

We literally spent hours on both *The Weakest Link* and *Who Wants To Be A Millionaire?*, and hearing both

» [PS2] Chris Tarrant's voice may be comforting to quiz show fans. The seemingly haunted 3D model of him definitely won't be.

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Anne Robinson and Chris Tarrant again brought back many fond memories of when they used to host on television.

This set me thinking: have any other quiz shows made it onto computer or console format?

D O'Conner

There are quite a few, as it turns out. If you're looking for the classics, 8-bit computer owners were able to enjoy versions of *A Question Of Sport, Blockbusters, Mastermind, Countdown* and *Mike Read's Pop Quiz. Wheel Of Fortune* has appeared on many formats over the years, as has American favourite *Jeopardy*. The last real champion of quiz show games seems to have been the Nintendo DS, which hosted games like *Eggheads*. These days, adaptations of popular quiz shows like *The Chase* and *Pointless* get released straight to mobile.

TELL ME TALES

Greetings,

Firstly, sweet publication. I'm a GameCube fanatic and have a host of games for the system which I enjoy. One in particular is *Tales Of Symphonia*, which is, to be honest – brilliant. Just the battle with Abyssion says it all. Life, trusting, understanding etc.

» [GameCube] We liked *Tales Of Symphonia* too, so we'd definitely be up for covering it in the future.

Please can you do a feature on *Tales Of Symphonia*, as I would be really interested as to who you would prefer to battle out of everyone in the game. And, I would really like to find out if anybody has completed the figurine book.

By the way, I have not subscribed to your mag yet, as I'm broke, but I will be as soon as I can.

Tim Barnett

DISCUSSED THIS MONTH

The Aftermath

We've all been fascinated with the interesting discussions provoked by last issue's Greatest Games Systems feature, riding the wave of delight and disgust depending on how each person's favourite machine did. The NES picked up the most flack for its high placing, although some were equally confused by the Dreamcast's finishing place in your final list.

***Tales Of Symphonia* is definitely something we could cover now, as is the entire *Tales* series – the first entry, *Tales Of Phantasia,* was released in 1995 on the SNES. We haven't got anything lined up right now, but it's a game that we'd like to cover in the future.**

From the forum

Every month, Retro Gamer asks a question on the forum and prints the best replies. This month we wanted to know…

What impression did GoldenEye make on you?

kiwimike

GoldenEye was just superb. While I still loved the likes of the simple FPS blasting of *Doom*, I could not believe how good this game looked at the time, and how it played. FPS with up/down always seemed a bit fiddly and yuck to me before *GoldenEye*, but the control was just spot on, and played like a charm.

I was still discovering fun things to do with remote bombs months after I first started playing it… then the multiplayer added another dimension again. What a game.

sidney

I remember it keeping me up night after night, I just became totally immersed in the whole thing, I had never played a shooter that good before and for a long while after.

TheAlex

Everything, but especially the level-design and music, was brilliant. I think I part-exchanged it for *Turok* and my brother wasn't too happy at first. Even without the multiplayer it was the best first-person shooter we'd played. *Perfect Dark* has to get a mention as it improved on the already-amazing *GoldenEye* in every possible way - perhaps only minus the *Bond* licence (but Joanna Dark, The Carrington Institute and Elvis were great, and it allowed for more of the Rare humour). *Perfect Dark* is the one I love to pick up and play today.

» [N64] A *GoldenEye* multiplayer screen triggers a retro response in a lot of us.

Big Shoes

We used to stay over at my friend's house and play *GoldenEye* until the early hours of the morning, at least four of us most evenings. It was amazing and the first time I really 'got' the multiplayer experience.

There is nothing like having friends round to play split screen, there was always one friend who knew where the Golden Gun was on every level, it was awesome and not beaten until *Halo* on the original Xbox where we regularly had 16 people, four TV's and four Xbox systems all linked up at someone's house.

antsbull

I went to university during the day (Computer Science), then worked until 1am in a burger joint, then finished with *GoldenEye* single player until 3am, then repeated. It also turned me onto *Bond* big time, and I ended up getting sleep deprivation!

retro GAMER

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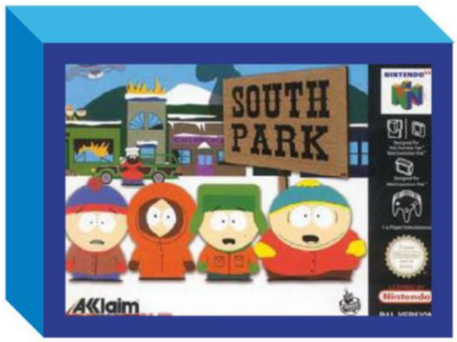

SOUTH PARK

» There's a comet headed for South Park, and it's a concentrated source of evil that no force of good can stand against. Luckily, four friends from the local elementary school are determined to defend the town, and the presence of Eric Cartman means that they could never be unambiguously described as a force for good. Let's join Stan, Kyle, Cartman and Kenny just after the end of their final encounter...

01

» Chef, who was the only clued up adult in South Park prior to his unfortunate dealings with the Super Adventure Club, informs the children that they have succeeded in getting rid of the evil comet. Hooray! Time for Salisbury steak?

02

» Nope, time for Kenny to get suddenly and inexplicably crushed to death by a safe. Why? Because that's what Kenny's there for, in these pre-season six times. He gets killed, they say the thing, and then he's back next week. Obvious.

03

» However, Chef, having already broken one of his traditional catchphrases by failing to say, "Hello there children," correctly, decides to steal Stan's thunder in Kenny's death skit. But this seems to completely throw off the balance of the universe.

04

» Suddenly, Kyle is ready to question things. Who is the mysterious 'they' that kills Kenny? Are Stan and Kyle directing frustration towards unknown forces, or the show's creators? Maybe it's the viewer, whose love of the gag necessitates the many cruel, unusual and completely arbitrary deaths of Kenny.

05

» Stan tries to bring reason by noting that it's what they always say, opening up another can of worms regarding the boys' recollection of Kenny's repeated deaths, but Kyle counters by asserting that it doesn't make sense. Stan flatly agrees, and as the rats feast on Kenny's head, that's your lot.

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